CATALOG 119

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TECHNI-TOOL®

Saluting The Past, Honoring The Future

PACE® worldwide
Since 1972

The right light
LUXO
Since 1969

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Since 1973

Unsurpassed Experience

Xcelite
Since 1965

We've supplied 52 lines for 30 years or more

Weller®
Since 1965

FLUKE®
Since 1976

Crescent®
Since 1973

LINDSTROM®
Since 1970

To Order: **800-832-4866** Or **www.techni-tool.com**

Tec-Cut Infinity Elite Cutters & Pliers

SAVE You Money 2 Ways

SAVE NOW

priced lower than competing brands

SAVE LATER

last longer with better performance

New!

More Info ON PAGE 182

The Best Hand Tools You May Ever Use!

These new Swiss-made Infinity Elite pliers and cutters are the best we've made in the almost 30-year history of Tec-Cut Infinity hand tools. No other brand delivers this peak level of performance and durability for the price.

Just look at all these features:

- **Unsurpassed performance for 20,000 cuts.** Infinity Elite cutters were computer tested against the 4 other leading manufacturers. The results?
  - Over the course of 20,000 cuts on the same part of the blade the force needed to open and close each cutter remained constant for Infinity Elite, but increased in 3 of the 4 competing brands due to blade damage and wear.
  - No blade damage or wear could be detected on the Infinity Elite tools even under 40X magnification visual inspection.
  - Infinity Elite cutter's master craftsmanship insures they will last as long, if not longer, as the leading brands
- **Lifetime Guarantee** against defects in materials or workmanship.
- **Exclusive 2-component fully dissipative handle** combines a soft surface for gripping with a hard plastic core for strength. This unique handle wears better and lasts longer than all ESD foam handles, plus is oil and grease resistant.
- **Special anti-fatigue design** developed through rigorous testing minimizes hand stress and allows hours of comfortable use.
- **Blue steel dual-leaf springs** provide maximum resilience and flexibility and guarantee thousands of trouble-free openings and closings.
- **Matched bearing rings** minimize metal-to-metal contact between blades and extend tool life.
- **Highest quality ball-bearing steel** is used throughout the line for ultimate toughness.
- **A lap joint blade design** joined with a steel screw keeps cutting edges in perfect alignment with less play far longer than tools connected with rivets.
- **Isothermal pre-hardening** of metal to 45 HRC before precision machining eliminates distortion and stress, guaranteeing the highest quality.
- **Pyrometer-controlled inductive hardening** to 63-65 HRC using proprietary equipment instills maximum strength and resistance to wear.
- **19 styles** cover all the most popular semi-flush and full-flush cutters and long, flat, round and snipe nose pliers. More styles to come during 2009.

TECHNI-TOOL CORPORATE OFFICE:

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1547 N. Trooper Rd., PO Box 1117
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- ★ GS-24F-0785A Scientific Equipment & Services
- ★ GS-27F-0030P Special Use Furniture
- ★ GS-27F-0031P Special Use Furniture
- ★ GS-28F-0037P Office Furniture
- ★ GS-07F-0095U Chemical - Cleaning Contract

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NOTE: All orders under $50.00 will be invoiced at $50.00.

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OKI OK INTERNATIONAL™

Configurable System Provides Versatility with SmartHeat® Power & Control!

MFR-1100 Series Single Output Soldering and Rework Systems

High power solution for production soldering, touch-up soldering and SMD rework. SmartHeat® technology delivers the energy needed for each connection while protecting sensitive components from damage. Three handpiece options offer a comprehensive range of soldering and rework cartridges.

Features:

- SmartHeat® technology provides exceptional power for high thermal demand applications
- High power output at a fixed temperature provides high throughput with excellent yields
- Each hand-piece has a comprehensive range of cartridges or tips for maximum flexibility
- Hand-pieces are ergonomically designed for comfort and safety

MFR-1110 Single output power supply, one cartridge soldering hand-piece, and workstand
No. 551SO1191.....$350.00

MFR-1120 Single output power supply, one tip soldering hand-piece, and workstand
No. 551SO1192.....$335.00

MFR-1140 Single output power supply, one precision tweezers hand-piece, and workstand
No. 551SO1193.....$453.00

TECHSPRAY — RoHS Compliant

Precision-V High Performance and Precision Cleaning Solvents

■ Non-flammable ■ Low VOC ■ Safe on most plastics

Powerful, leaves no residue, and evaporates extremely fast. They clean electronics, optics, and metal parts quickly and thoroughly, eliminating the need for further rinsing. Precision-V's non-ozone depleting formula makes it an ideal replacement for cleaners containing CFC 113, HFC-141b and AK225.

Precision-V Flux Removers

Clean R, Ra, RMA and SA type flux residues after high temperature reflow, wave and hand soldering. Ideal for lead and lead-free processes.

16 oz. Aerosol
No. 754CH1655 ....$26.92
1 Pint
No. 754CH1656 ....$40.60
1 Gallon Glass Bottle
No. 754CH1657 ..$295.24

Precision-V Maintenance Cleaners

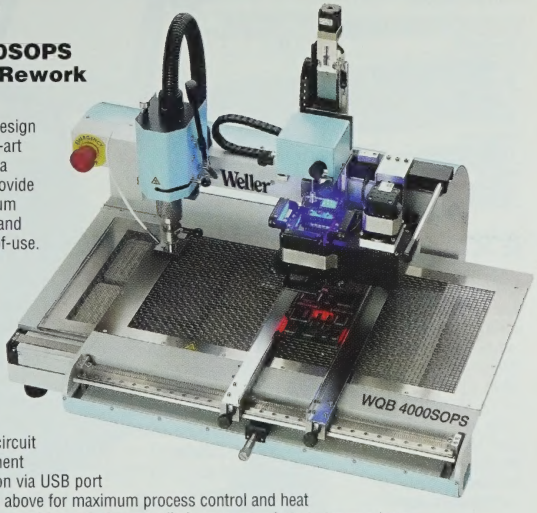
Remove oils, grease, silicone and other common industrial contaminants.

16 oz. Aerosol
No. 754CH1651 ....$26.92
1 Pint
No. 754CH1652 ....$40.60
1 Gallon Glass Bottle
No. 754CH1653 ..$295.24

Weller®

WQB 4000SOPS Repair & Rework System

Combines new design with state-of-the-art split optic camera technology to provide reliability, optimum process control and enhanced ease-of-use.



Features:

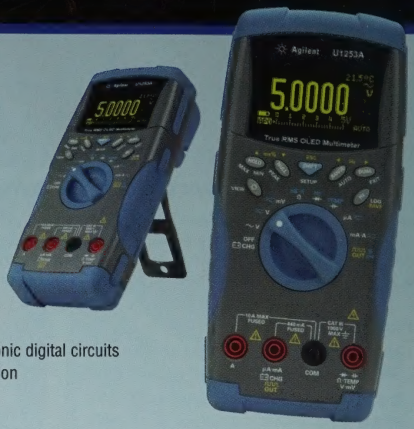
- Easy-to-use
- Split optics for perfectly accurate positioning
- Perfect component/circuit board alignment
- PC connection via USB port
- Heating from above for maximum process control and heat from below for rapid, precisely-controlled warm up substrate temperatures
- Monitoring software for comprehensive functions

Specifications:

Total power rating: 1800 watts
Temperature control range: 150-750°F (50-400°C)
Compressed air supply: 58-87 psi, purified, dry compressed air or Nitrogen
Maximum component size: 1.97" x 1.97" (50mm x 50mm)
Maximum board size: 20" x 20" (510mm x 510mm)
No. 272SO4000.....$25,000.00

Agilent Technologies

Authorized Distributor



Read display in dark without backlighting!

U1253A OLED Handheld Digital Multimeter

No more squinting to read DMM display. New OLED technology delivers crystal-clear viewing indoors, or in dark, off-angle areas. High-performance and easy-to-use. **Includes:** Silicone test leads, alligator clips, battery charger, certificate of calibration and test report. ***3-Year Warranty.***

Features:

- Math function and shift key
- Broad range of measurement functions including temperature and capacitance
- Built-in battery charging for optimum capacity
- 50,000 count dual display with true-RMS reading
- Data logging capability
- 20 MHz frequency counter
- Programmable square wave generator for stimulation of electronic digital circuits
- CAT III 1000V overvoltage protection

No. 431TE253 .....$449.00

BK PRECISION
ELECTRONIC TEST INSTRUMENTS

Model 4071 31.5 MHz Synthesized Arbitrary Waveform Generator

Access functions quickly from front panel keypad. Custom design your waveforms on a PC, or download from any source.

JUST THE FACTS	
Bandwidth	DC 31.5 MHz
Frequency Resolution	0.01 Hz
Waveforms	Sine, Square, Pulse
Arbitrary	32K points;
Waveform	40 Msample/Sec
Warranty	One Year
TT No.	**310TE4071**
PRICE	**$1,796.88**

BK PRECISION
ELECTRONIC TEST INSTRUMENTS

DC Electronic Load

Compact, economical DC load continuously tests 5 volt power supplies to 30 amps. **Features:** Operates between 0-50 VDC, 1mA (150 W max); Easy operation; Bright, easy-to-read display, Two current ranges: 3A and 30 A; Constant current, resistance and voltage operation; Over-current and over-voltage protection; Short mode to simulate shorts. Saves up to 400 settings. **Includes:** Power cord and user manual. ***One-Year Warranty.***

No. 310TE8540 .....$499.00

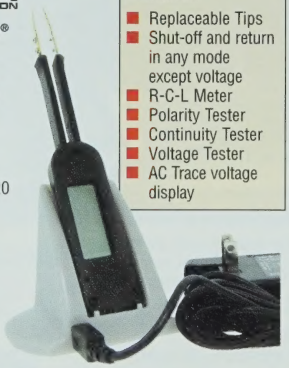
50cm Stacking Retractable Sleeve Plug Output Cable Kit
No. 310TE0912 .....$22.00

EXCELTA CORPORATION

IntelliTweeze®

New rechargeable IntelliTweeze® TM-300 comes with a charging cradle - no batteries. When not in use, you set the TM-300 in the cradle and it charges itself. Universal 110-220 volt power adapter is included. Unit can be charged from any powered USB port (Cable not included). The TM-300 has the same features as the TM-200, but without the batteries.

No. 352TE300 .....$530.16



Features:

- Replaceable Tips
- Shut-off and return in any mode except voltage
- R-C-L Meter
- Polarity Tester
- Continuity Tester
- Voltage Tester
- AC Trace voltage display

SCIENSCOPE

XGA Video Inspection System

Combines the crisp clarity of a high resolution XGA 1024 x 768 analog camera with the space-saving convenience of an LCD monitor. Macro video optics provide detailed inspection up to 60x or super large fields of view with infinite working distance. **Includes:** Micro zoom lens; Focus mount; Dual arm boom stand; XGA Camera with maximum resolution 1024 x 768; 17" Color LCD Monitor.

696IN058

MCA-PK5-LED-X also includes:
Macro Zoom Adapter, 76mm to 47mm
No. 696IN046 .....$2,704.30

MZ7-PK5-LED-X includes:
Micro Zoom Adapter, 76mm to 39mm, 0.5X Video Coupler
No. 696IN058 .....$2,790.00

XGA Camera Specifications:
Sensor size: 1/2.5
Frame rate: 60fps
Output: D-sub 15 pin analog signal
Lens mount: C-mount
Operation voltage: DC-5V
Dimensions: 70mm x 52mm x 51mm

JDSU LanScaperPRO™ Cabling and Network Tester

Combines the functions of a high-end cable tester and length measurement device with the capability to identify, monitor, and correct LAN issues with physical layer and link conditions in a network.

Features:

- Detects and reports active Ethernet devices and POTs, ISDN, Token Ring, and other devices at the other end of a line for 10BASE-T or 100BASE-Tx
- Identifies IEEE 802.3af PoE and legacy Cisco In-Line Power at the other end of the jack or cable, including presence of raw DC power. Verifies wiring installation capability to provide PoE to end device
- Simultaneously pings three addresses: target, router, and ENS server. DHCP support allows for pinging of router and ENS server with no setup
- Blinks to identify hub or switch port and links to Cisco bridge or router ports
- Tests cabling configuration and verifies connectivity while conducting tests for opens, shorts, miswires, split pairs, and reverses
- Display length measurement for each pair in feet or meters
- Wiremaps network connections with remote identifiers
- Generates selectable tones on selected pins for use with tone tracers

Includes: Cable test remote, two 1ft patch cables, two RJ45 to alligator clips and Cordura case
No. 772TE800.....**$599.95**

LanScaperPRO™ Cabling and Network Tester Kit

Includes: Eight cable test remotes, ToneTracer (TT100), two 1ft. patch cables, two RJ45 to alligator clips, two RJ45 to F-connector adapters, two no-fault RJ12 cables, zippered Cordura case.
No. 772TE850 .....**$799.95**

JDSU TestifierPRO™ Cable Tester

Easy-to-use, hand-held unit tests low voltage cabling systems supporting voice, data, Internet and video applications. One button operation initiates Telco, Coax, and Network mode for diagnostic tests and results. Built-in RJ11 and RJ45 interfaces for testing 6- and 8-wire twisted pair and built-in F connector for testing coax. Remote bay houses detachable test remote with built-in jacks for testing twisted pair telco and network cable.

TestifierPRO, #1 onboard remote and pouch
No. 772TE650 ....**$249.95**

TestifierPRO, #1 to 8 remotes and zippered pouch
No. 772TE655 ....**$324.95**

Set of 10 (1-10) coax remote identifiers
No. 772TE310 .....**$29.40**

Set of 20 (1-20) coax remote identifiers
No. 772TE311 .....**$55.08**

Set of 20 (1-20) RJ45 remote identifiers
No. 772TE0312 ....**$33.03**

Set of 20 (1-20) RJ11 remote identifiers
No. 772TE314 .....**$33.03**

Set of 7 Network remote identifiers (#2-8)
No. 772TE608 ....**$108.23**

RJ12 to RJ12 cable for no-fault connector to RJ11 or RJ45 jacks - 7.5" cable assembly
No. 772TE020 .....**$2.02**

Unshielded cable with RJ45 connections - 12"
No. 772TE056 .....**$2.18**

RJ45 to alligator clips cable - 12"
No. 772TE040 .....**$5.41**

GREENLEE

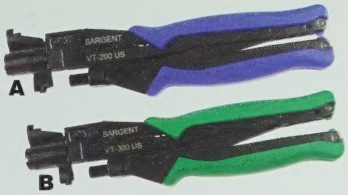
Compression Crimping Tool

Requires less force than traditional hex-style crimp. Ergonomic Sanoprene grips reduce hand fatigue. Terminates most compression-style connectors. Fully adjustable for crimping different coax connector types. **Specs:** 7.2" x 2.2" x 0.8" Cable preparation: braid and dielectric - 1/4" center conductor 5/16".
No. 414IE807 .....**$48.35**

Paladin Tools

SealTite® Pro Compression Tool

Crimp all types of compression connectors with one tool! Single, reversible head crimps: CATV "F", BNC, RCA and right-angle connectors. Adjust crimp height with thumb screws. Comfortable, rubber-embedded handles and advanced fully ratcheted system reduce hand strain. ***Five-Year Warranty.***
No. 618IE1555 .....**$69.99**



SARGENT QUALITY TOOLS CATV & Satellite Compression Tools

Simple parallel action plier frame.

Features:

- Front-load design allows for ease of compression in confined areas
- Rotatable head quickly and easily alternates for compression of RG6, RG59, RG7 and RG11 connectors in one tool
- Comfortable grips
- Hardened steel construction
- Black oxide finish
- Designed for PPC AquaTight Fittings and many other popular compression connectors

For Thomas & Betts SNS and PPC EXXL RG6/59 "F", RCA and BNC connectors
A. No. 694IE200 VT-200 US **$42.50**

For RG11/7 Thomas & Betts SNS and PPC EXXL connectors
B. No. 694IE300 VT-300 US **$42.50**

Since our start in 1959

WORLD-CLASS CUSTOMER SERVICE

has been a cornerstone of the company

- **Our National Account Coordinators**
  focus on your unique needs and give you the personal attention you deserve.
- **Our 36 Technical Field Experts**
  are factory-trained to help you solve real-world problems.
- **Our Government Team**
  provide Government customers with experience, dedication and 6 GSA contracts.
- **Our Advanced Logistics Management System**
  uses RF technology to ensure 97% order accuracy.

We know in times like this you have enough to do. When you're a Techni-Tool customer, getting your supplies correctly and on-time is one less thing you have to worry about.

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Weller® WD Series Soldering Stations

Best Sellers

Features:

- 3 programmable independent fixed temperature buttons allow you to preset temperature settings
- Program setback time and temperature to your specification
- Programmable lockout window range so you can restrict temperature settings within a pre-determined range
- Programmable temperature offset and auto-shutoff to preserve tip-life
- WP80 soldering pencil delivers 80 watts of power and includes a special silver heating element for low thermal loss and fast recovery. Ideal for continuous production soldering. ***Uses LT Series Tips (sold separately), SEE CHART BELOW***
- 65 watt WMP soldering pencil has a tip-to-grip distance of just 37mm for improved accuracy. Heating element built into the pencil, replacement tips cost less. ***Uses NT Series Tips (sold separately), SEE CHART BELOW***

Iron Stand Features: 3 storage openings for tips, and 4-step tilt adjustment ranging 30° - 80°; Anti-static finish.

RoHS Compliant

272SO478

Systems, Irons and Stands:

WD1002 Single Channel Station w/WP80 80 Watt Pencil & Stand
No. 272SO478 .....**$321.49**

WD1001 Single Channel Station w/WMP 65 Watt Pencil & Stand
No. 272SO471 .....**$321.49**

WD1 Single Channel Digital Power Unit, 85W, 120V
No. 272SO473 .....~~$201.06~~
SALE PRICE $149.00

WD2 Dual Channel Digital Power Unit, 160W, 120V
No. 272SO472 .....~~$309.66~~
SALE PRICE $229.00

WDH10 Stand for WSP80/WP80, Pencil
No. 272SO474 .....**$41.54**

WDH20 Stand for WMP Pencil
No. 272SO475 .....**$41.54**

WP80 Soldering Pencil
No. 272SO877 .....**$116.13**

WMP Soldering Pencil
No. 272SO1233 .....**$116.13**

WDH10T Stand for WP80, WSP80 pencil with automatic setback function
No. 272SO1691 .....**$83.87**

WDH20T Stand for WMP pencil with automatic setback function
No. 272SO479 .....**$83.87**

Sale Prices Good Until February 28, 2009

DUAL CHANNEL!

SALE $229.00 Sale Ends 2/28/09

272SO472

See Page 6 for WR3000M Rework Station

Tips for the WP80 & WMP Soldering Pencil

NT Series Tips - For WMP Soldering Pencil

	TT No.	Type	Point in. (mm)	Width in. (mm)	Length in. (mm)	PRICE
NT1	272SO701	Micro	0.010 (0.25)	-	0.291 (7.40)	$10.21
NT1S	272SO7010	Micro	0.010 (0.25)	-	0.333 (8.45)	$10.21
NT1X	272SO7011	Bent Round	0.016 (0.40)	0.063 (1.60)	0.321 (8.15)	$12.26
NT4	272SO704	Round	0.047 (1.20)	-	0.390 (9.90)	$10.21
NT6	272SO706	Chisel	0.063 (1.60)	0.016 (0.40)	0.372 (9.45)	$10.21
NTA	272SO730	Chisel	0.063 (1.60)	0.016 (0.40)	0.331 (8.40)	$10.21
NTAX	272SO731	Bent Chisel	0.063 (1.60)	0.031 (0.80)	0.339 (8.61)	$12.26
NTB	272SO732	Chisel	0.094 (2.40)	0.031 (0.80)	0.289 (7.35)	$10.21
NTC	272SO733	Chisel	0.126 (3.20)	0.031 (0.80)	0.305 (7.75)	$10.21
NTD	272SO734	Chisel	0.157 (4.00)	0.031 (0.80)	0.305 (7.75)	$17.02
NTGW	272SO735	Gull Wing	0.079 (2.00)	0.118 (3.00)	0.528 (13.40)	$17.34
NTH	272SO736	Chisel	0.031 (0.80)	0.016 (0.40)	0.331 (8.40)	$10.21
NTK	272SO737	Chisel	0.047 (1.20)	0.016 (0.40)	0.331 (8.40)	$10.21

LTSMT Series Tips - For WP80 Soldering Pencil

Tip	TT No.	Type	Component Type	A in. (mm)	B in. (mm)	C in. (mm)	PRICE
A C B	272SO8001	Blade	Any (For Pad Clean-up)	0.41 (10.41)	0.02 (0.55)	0.28 (7.11)	$71.50
	272SO8002	Blade		0.62 (16.74)	0.02 (0.55)	0.28 (7.11)	$79.68
	272SO8003	Blade		0.82 (20.82)	0.02 (0.55)	0.28 (7.11)	$86.02

LT Series Tips - For WP80 Soldering Pencil

Tip	TT No.	Description	PRICE
	272TI900	Round tip 0.25mm	$4.00
	272TI901	Round tip 0.20mm	$4.00
	272TI906	Chisel tip 1.6mm	$4.00
	272TI902	Chisel tip 2.4mm	$4.00
	272TI908	Chisel tip 3.2mm	$4.00
	272TI903	Chisel tip 4.5mm	$4.00
	272TI909	Chisel tip 0.8mm	$4.00
	272TI910	Chisel tip 1.2mm	$4.00
	272TI851	Round bent tip .25mm	$4.00
	272TI852	Chisel bent tip 1.6mm	$4.00
	272TI856	Chisel bent tip 0.8mm	$3.99
	272TI853	Bent tip 1.2mm	$4.00
	272TI855	Long bent round tip 0.3mm	$4.00
	272TI789	Chisel tip 3.2mm	$4.00
	272TI157	Round tip 0.4mm	$4.00
	272TI433	Round tip 0.2mm	$4.00
	272TI432	Bent Round tip 0.2mm	$4.00
	272TI790	Single Flat tip 1.2mm	$4.00
	272TI431	Chisel Tip 2mm	$4.00
	272TI907	Round tip 1.6mm	$4.00
	272TI905	Round tip 3.2mm	$4.00
	272TI857	Knife tip 6.2mm	$4.00

Weller

The best-selling, affordable soldering station – for everything from continuous production soldering to occasional use.

Best Sellers

Automatic Shut Off & Temperature Lockout!

DIGITAL

272SO5111

272SO5112

The Weller Advantage

- Innovative heater and sensor combination gives you quick heat-up and rapid temperature recovery.
- Wireless temperature lockout prevents operators from raising the temperature to levels higher than specified for the board or component. Gives you control over the process.
- Station automatically powers down after 90 minutes of inactivity to prolong tip life and save power.
- **Applications:** Production, rework, and repair of thru-hole and SMT boards. Most ground planes and multi-layer boards.

WES51 Soldering Station

Specs: Accuracy: ±9°F; Temperature range: 350°F to 850°F; Output voltage: 24V. *Meets ANSI specs.* (Mexico)

50W analog station with PES51 soldering pencil, PH50 stand, sponge, ETA tip
No. 272SO5111 (WES51) **$127.95**

50W digital station with PES51 soldering pencil, PH50 stand, sponge, ETA tip
No. 272SO5112 (WESD51).....**$177.41**

50W, 240 V digital station with PES51 soldering pencil, PH50 stand, sponge, ETA tip
No. 272SO5113 (WESD51D) **$184.93**

WES/WESD Accessories

PES51 slim soldering pencil for WES51, ETA tip
No. 272SO5101 .....**$40.72**

PH50 soldering stand and sponge for PES51 pencil
No. 272SO511 .....**$18.02**

PES50 soldering pencil for WES50, ETA tip
No. 272SO510 .....**$42.75**

ET Series Tips - For EC1201A, EC1201AFE, EC1204, EC1001-1, EC2002m,WCC100, WES50, WES51, WESD51 irons.

Tip	TT No.	Model No.	Description	Tip Size	PRICE/ Ea.
	272TI187	ETAA	Single Flat	1/16"	$3.76
	272TI148	ETCC	Single Flat	1/8"	$3.76
	272TI152	ETDD	Single Flat	3/16"	$3.76
	272TI162	ETO	Long Conical	1/32"	$3.76
	272TI168	ETS	Long Conical	1/64"	$3.76
	272TI191	ETJ	Long Screwdriver	1/32"	$3.76
	272TI156	ETK	Long Screwdriver	3/64"	$3.76
	272TI160	ETM	Long Screwdriver	1/8"	$3.76
	272TI166	ETR	Narrow Screwdriver	1/16"	$3.76
	272TI3204	ETA	Screwdriver Tip	1/16"	$3.76
	272TI144	ETB	Screwdriver Tip	3/32"	$3.76
	272SO489	ETC	Screwdriver Tip	1/8"	$3.76
	272TI150	ETD	Screwdriver Tip	3/16"	$3.76
	272TI154	ETH	Screwdriver Tip	1/32"	$3.76
	272SO157	ETKN	Knife Tip	.180"	$3.76
	272TI164	ETP	Conical Tip	1/32"	$3.76
	272TI182	ETT	Conical Tip	.024"	$3.76
	272TI186	ETU	Single Flat	1/64"	$3.76
	272TI188	ETV	Single Flat	.024"	$3.76
	272TI158	ETL	Screwdriver Tip	5/64"	$3.76

Weller WSF 81D Solder Feed System

New! RoHS Compliant

System automatically feeds wire solder in pre-programmed amounts or continuously through control on handpiece or optional foot switch. Provides a more comfortable operator environment when soldering. Two models handle different diameter solder wire, and automatically adjust to exact wire diameter to ensure it feeds straight. **Includes:** WSFP series 80W soldering iron with LTBX tip, featuring fast heat up and exceptional heat recovery. ***Uses LT tips (sold separately).*** Ideal for lead-free environments. Temperature range: 150°F - 850°F.

WSF81D5 for 0.5mm (.020") to 0.8mm (.031") diameter solder
No. 272SO8105 .....**$1,381.38**

WSF81D8 for 0.8mm (.031") to 1.5mm (.059") diameter solder
No. 272SO8108 .....**$1,381.38**

Foot switch
No. 272SO099.....**$42.45**

WTCPT Stations, Tips & Replacement Irons

The Weller Advantage

- Utilizes unique closed loop method of controlling maximum tip temperature – protects temperature sensitive components
- A ferromagnetic temperature sensor in the tip controls tip temperature - no adjustments are necessary. Provides process control.
- **Applications:** Production, rework, and repair of thru-hole and SMT boards. Some ground planes and multi-layer boards. Repetitive soldering at a consistent temperature.

Weller®

WTCPT Temperature Controlled Soldering Station

FEATURES
- ESD Safe
- Power unit feature impact resistant plastic for durability
- Comes with PTA7 tip, PU120T power unit, TC201T soldering pencil, stand and sponge
- Quick disconnect plug for soldering iron allows fast iron change

Specs: ***Soldering tool:*** *42W;* ***Output:*** *24V.* Tip included. 220V available. (Mexico)

WTCPT Soldering Station & Stand
No. 272IR365 .....$160.21

TC201T Soldering Pencil Only
No. 272IR290 .....$83.87

Soldering Iron Stand Only
No. 272SO1201.....$26.38

WTCPT Replacement Parts

Heater assembly (24V) plug in type
No. 272IR235 ....$18.51

Switch assembly for pencil
No. 272IR288 ....$30.26

Cord set w/plug
No. 272SO217 ....$23.76

Barrel nut assembly
No. 272IR064 .....$6.67

Sponge (each)
No. 272SO205 .....$1.12

WTCPTFE

Combines the WTCPT station with a 42W Fume Extraction Iron (TC201FE). Use with any Weller® fume extraction system. (Mexico)

WTCPTFE Soldering Station Plus Stand
No. 272IR001 .....$254.75

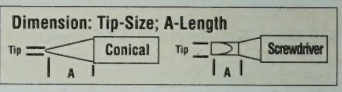
TC201FE Fume Extraction Iron Only
No. 272IR202 .....$105.38

PT Series Tips for WTCPT Stations and TC201 Series Irons

Quantity Discounts Available

Tip	TT No.	Temp Series	Model No.	Shape	Dims. In. Tip	Dims. In. A	PRICE
	272TI1026	700°F	PTA7	Screwdriver	.062"	.62"	$3.38
	272TI1028	800°F	PTA8				$3.38
	272TI1034	800°F	PTAA8	Single Flat	.062"	.62"	$3.38
	272TI1040	800°F	PTB8	Screwdriver	.093"	.62"	$3.38
	272TI1046	800°F	PTBB8	Single Flat	.093"	.62"	$3.38
	272TI1050	700°F	PTC7	Screwdriver	.125"	.62"	$3.38
	272TI1052	800°F	PTC8				$3.38
	272TI1056	700°F	PTCC7	Single Flat	.125"	.62"	$3.38
	272TI1058	800°F	PTCC8				$3.38
	272TI1064	800°F	PTD8	Screwdriver	.187"	.62"	$3.38
	272TI1076	800°F	PTE8	Screwdriver	.234"	.62"	$3.38
	272TI1080	700°F	PTF7	Conical Flat	.047"	.62"	$3.38
	272TI1082	800°F	PTF8				$3.38
	272TI1086	700°F	PTH7	Screwdriver	.031"	.62"	$3.38
	272TI1088	800°F	PTH8				$3.38

Dimension: Tip-Size; A-Length



Tip	TT No.	Temp Series	Model No.	Shape	Dims. In. Tip	Dims. In. A	PRICE
	272TI1110	700°F	PTO7	Conical	.031"	1.0"	$3.38
	272TI1112	800°F	PTO8				$3.38
	272TI1116	700°F	PTP7	Conical	.031"	.62"	$3.38
	272TI1118	800°F	PTP8				$3.38
	272TI1122	700°F	PTR7	Narrow Screwdriver	.062"	.62"	$3.38
	272TI1124	800°F	PTR8				$3.38
	272TI1127	700°F	PTS7	Long Conical	.015"	1.0"	$3.38
	272TI008	800°F	PTS8				$3.38
	272TI1085	700°F	PTJ7	Long Screwdriver	.031"	1.0"	$3.38
	272TI1087	800°F	PTJ8				$3.38
	272TI1092	700°F	PTK7	Long Screwdriver	.046"	1.0"	$3.38
	272TI1094	800°F	PTK8				$3.38

TIPS STILL AVAILABLE FOR MT1500 MICROTOUCH PLUS™!

MT1500 Station Microtouch Plus™ Tips

	TT No.	Tip No.	Description	Size (inches)	PRICE
	272TI0202	MT202	Conical	.030D x 1.0L	$51.34
	272TI320	MT302	Conical	.015D x .020L	$61.14
	272TI606	MT606	Conical	.016D x .530L	$61.14
	272TI303	MT303	Conical, Bent 30°	.015D x .320L	$61.14
	272TI603	MT603	Conical, Bent 30°	.020D x .600L	$61.14
	272TI605	MT605	Conical, Bent 30°	.016D x .560L	$61.14
	272TI607	MT607	Bevel 30°	.020D x .530L	$61.14
	272TI608	MT608	Bevel 30°	.040D x .560L	$59.07

	TT No.	Tip No.	Description	Size (inches)	PRICE
	272TI611	MT611	Chisel	.060D x .610L	$61.14
	272TI614	MT614	Chisel	.100D x .190L	$61.14
	272TI211	MT211	Screwdriver	.045D x 1.0L x .015T	$59.18
	272TI412	MT212	Screwdriver*	.045D x 1.0L x .005T	$67.82
	272TI311	MT301	Screwdriver	.047D x .200L	$61.14
	272TI601	MT601	Screwdriver	.070D x .385L	$61.14
	272TI602	MT602	Screwdriver	.100D x .390L	$61.14
	272TI604	MT604	Screwdriver	.060D x .390L	$61.14
	272TI610	MT610	Screwdriver	.200W x .350L	$61.14
	272TI617	MT617	SMT Blade	.410L x .022W	$129.89

*Non Wetting

Weller®

WD1000M & WD2000M

Multi-Function Soldering Stations

272S04701

272S02000

SUPERIOR LEAD FREE PERFORMANCE

New generation soldering stations provide high speed regulation of new WMRP micro soldering pencil and WMRT micro desoldering tweezer tools. The single and dual channel stations feature modern LCD displays that provide critical information at a glance, while three programmable temperature preset buttons allow quick and easy temperature changes. Each station includes the WMRP Micro Soldering Pencil and WDH50 Stop and Go Stand. The WD2000M dual channel station also includes a WMRT Micro Thermal Tweezer and WMRTH Stop and Go Stand which immediately powers the tweezers when you pick them up. **Specs**: Temperature range: 150-850°F (50-450°C); 120V input; 24V output.

WD1000M Single Channel Soldering Station
No. 272S04701 .....**$536.53**

WD1M Single Channel Power Unit with High Speed Regulation
No. 272S04731 .....**$251.60**

WD1000HPT
WD1M single channel power unit with WP120 120W soldering iron and WDH10T Stop + Go stand
No. 272S04712 .....**$613.38**

WD2000M Dual Channel Soldering Station
No. 272S02000 .....**$930.05**

WD2M Dual Channel Power Unit with High Speed Regulation
No. 272S02002 .....**$354.82**

272S04712

WMRT Micro Tweezer with Stop and Go Stand and RTWZ tip set
A. No. 272S0847 .....**$327.94**

WMRP Soldering Pencil (tips sold separately)
B. No. 272S0843 .....**$126.88**

WDH50 Holder and Sponge for WMRP Soldering Pencil
C. No. 272S05699 .....**$93.54**

WP120 120 W soldering iron
No. 272S04753 .....**$173.06**

WP120 iron and **WDH10T** stand
D. No. 272S04743 .....**$209.92**

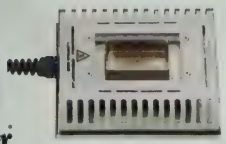
WDC2 Dry Cleaner for use with WDH Iron Stands
E. No. 272S02599 .....**$12.90**

RT Series Tips for WMRP Soldering Iron

Tip	TT No.	Tip No.	Cartridge Desc.	Width	Thickness	PRICE
	272S0919	RT1	Needle	0.2mm	–	$33.22
	272S01299	RT1SC	Chisel	0.4mm	0.15mm	$48.38
	272S0929	RT2	Fine Point	0.8mm	–	$33.22
	272S0939	RT3	Chisel	1.3mm	0.4mm	$33.22
	272S0949	RT4	Chisel	1.5mm	0.4mm	$33.22
	272S0959	RT5	Bent Chisel	0.8mm	0.4mm	$33.22
	272S05969	RT6	Round Sloped	1.2mm	–	$33.22
	272S0979	RT7	Knife	2.2mm	–	$34.88
	272S0989	RT8	Chisel	2.2mm	0.4mm	$33.22
	272S05999	RT9	Chisel	0.8mm	0.4mm	$33.22
	272S01099	RT10	Gull Wing	1.2mm	2.0mm	$33.22

WMRT Micro Desoldering Tweezer Tip Sets

Tip	TT No.	Model	Description	PRICE
	272S05199	RTW 1	0.2 mm, 45°	$69.76
	272S05299	RTW 2	0.7 x 0.4mm, 45°	$69.76
	272S05399	RTW 3	3 x 0.7mm, 45°	$82.78
	272S05499	RTW 4	6 X 0.7mm, 45°	$82.78

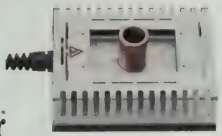


CERTIFIED FOR LEAD FREE SOLDER

Weller®

WSB150 Solder Baths

Ideally suited to tin coating and for preparation of soldering components. 150W/24V heat output adjustable from 150°F to 999°F. Lead-free compatible.
No. 272S04299 .....~~$326.06~~
SALE PRICE $271.00



CERTIFIED FOR LEAD FREE SOLDER

Weller®

WSB80 Solder Baths

80W/24V solder bath can be used with any Weller 80W power unit to tin wire ends, clean and tin component leads, and clean extraneous solder particles. Temperature range is adjustable from 150° to 850°F. Compatible with lead-free solders.
No. 272S0499 .....~~$220.42~~
SALE PRICE $182.00

Weller®

WHP200 Infrared Under Board Heater

New!

Small yet powerful and designed for use on small multilayer PCBs. Minimizes risk of thermal damage and speeds up repairs. Integral board holder eliminates need for additional equipment. Ideal for wide range of consumer boards. Set and actual temperatures displayed. Temperature range: 150°-750°F (50°-400°C). Dimensions: 7.6" x 7.6" x 3.3". 120 V. Medium wave infrared. Includes power cable.
No. 272S0250.....**$686.08**

Sale Prices Good Until February 28, 2009

Weller® WRS Rework, Repair Systems

WR3000M Triple Channel Rework System

Features 3 independent channels with automatic tool detection and connectivity to all Weller high-speed micro tools. Large LCD display. Built-in vacuum channel for pick-up. Comprehensive pc software for monitoring, setting parameters and data logging included; USB port for uploading software upgrades. Indicator LED blinks when tool is at selected temperature. Temperature ranges: hot air 150-1022°, soldering 150-850°. **Includes:** WR 3M power unit; new HAP200 200W hot-air pencil with adjustable, directional air flow; DXV80 80W desoldering iron; WP80 80W micro soldering pencil; WVP vacuum pick-up tool; WDC2 dry tip cleaner. USB software and cable.

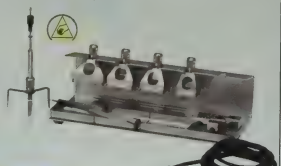
No. 272S09300.....**$1,944.58**

WR 3M Power Unit Only
Includes: Adapter for HAP200 hot air pencil, USB software and cable.
No. 272S07300.....**$1,296.03**

WRK SMT Chip Removal Nozzle Kit

Works with WR3000M rework station. Nozzle functions as convection oven to melt solder and vacuum lifts component up to 30 x 30 mm. Kit contains 9 progressively sized nozzles. ESD-safe.

No. 272S05599 .....**$322.56**

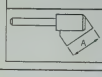


WTA50 Thermal Tweezer Kit

This thermal tweezer is compatible with all Weller® EC, WD/WSD (Silver Series) and WRS systems. **Includes:** 50W thermal tweezer and stand.

No. 272S0399 .....~~$203.22~~
SALE PRICE $168.00

Tips for WTA50 Thermal Tweezer

Tip	TT No.	Model No.	Size A" (mm)	PRICE
	272TI014	WTA1	0.039" (1mm)	$16.58
	272S0178	WTA2	0.118" (3mm)	$16.58
	272S00212	WTA3	0.236" (6mm)	$16.58
	272TI024	WTA4	0.492" (12.5mm)	$30.19
	272TI025	WTA5	0.728" (18.5mm)	$30.19

MPR80 Soldering Pencil

80 watt adjustable angle soldering pencil allows you to solder in hard-to-reach areas where a straight handpiece can't go. Works with all Weller WD and WR3M series stations. **Includes:** Stand and LTB tip.

No. 272S0319 .....**$161.28**

WRS3000VX Triple Channel SMT Rework Station

3 independently controlled 100 watt channels plus air and vacuum ports let you use up to 3 tools simultaneously for rework of mixed technology boards. Can be used for lead-free applications. Higher power means less time spent on the PCB and less potential for damage. Vacuum delay feature prevents clogging by letting solder reach the collection chamber before vacuum shut off. Temperature set-back can be programmed from 5-60 minutes. Ionizing circuit delivers static-free air. Timer function for stand-by and hot air flow. 150° to 850° temperature range. Air flow 1- 10 l/min. **Includes:** DXV80 desoldering pencil and WSP80 soldering iron.

No. 272S03000 .....**$1,326.08**

WRS3000VX

WRS Series Digital Self-Contained Rework and Desoldering Stations

Digital temperature control from 150° to 999°. Internal pump eliminates need for shop air. Ideal for lead-free applications.

WRS1002 Hot Air Rework Station

Includes: 100W HAP1 hot air pencil with finger-activated switch for exceptional control. Air flow 1-6 l/min.

A/B. No. 272S00823....**$946.18**

HAP1 hot air pencil and stand
No. 272IR003 .....**$219.34**

HAP1 hot air pencil and stand

DXV80 desoldering pencil with AKV80 stand

WRS1002X Desoldering Station

Station features 80W of power for faster heat up and better performance. Includes DXV80 desoldering pencil with internal disposable solder collection tube. Air flow 1- 10 l/min. ***Uses DX series desoldering tiplets.***

A/C. No. 272S01002....**$924.67**

DXV80 desoldering pencil with DX112 tiplet
No. 272S0800 .....**$207.52**

AKV80 stand for DXV80 pencil
No. 272S0890 .....**$58.14**

Disposable solder collection tube
No. 272S0815 .....**$7.47 5/pk**

Tiplets for DXV80 Pencil

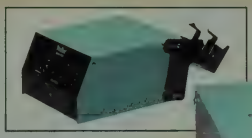
	TT No.	Model	A (O.D.)		B (I.D)		C		PRICE
			Inch	mm	Inch	mm	Inch	mm	
	272S09110	DX110	0.075	1.90	0.028	0.70	0.906	23.00	$13.38
	272S09111	DX111	0.098	2.50	0.028	0.70	0.906	23.00	$13.38
	272S09112	DX112	0.091	2.30	0.039	1.00	0.906	23.00	$13.38
	272S00113	DX113	0.098	2.50	0.047	1.20	0.906	23.00	$13.38
	272S0114	DX114	0.130	3.30	0.071	1.80	0.906	23.00	$13.38
	272S00116	DX115	0.075	1.90	0.028	0.70	0.906	23.00	$13.38
	272S09117	DX116	0.106	2.70	0.047	1.20	1.142	29.00	$13.38

Weller®

Get Rock-Solid Temperature Control!

WHA900 Hot Air Station

Maintain nozzle temperature regardless of hot air flow rates. Sensor at nozzle continuously samples temperature and instantly adjusts heat to maintain preset temperature. Powerful enough to work on most multi-layer boards. Suitable for lead-free solders. **Specs:** 650 watts of power; Internal air adjustable from 5 l/min to 50 l/min; Temperature variable from 100°F to 1,000°F.

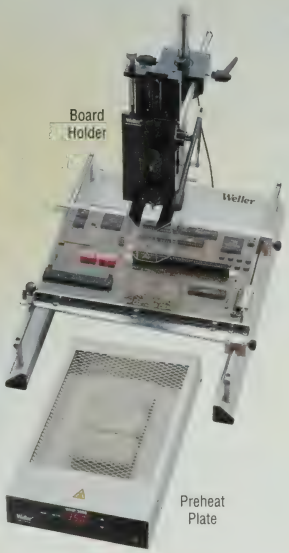


Features:

- Front panel push-button activates hot air and sets unit back to pre-defined temperature and airflow settings
- User-set temperature offset for deviation in actual and air temperature setting
- Sturdy and flexible corrugated burn-proof air hose
- Uses Weller hot air nozzles (sold separately)

No. 272SO1900.....**$590.29**

Hot air station with HAP3 hot air pencil, stop and go stand



Board Holder

Preheat Plate

Weller®

WHA3000 Self-Contained Digital Hot Air System

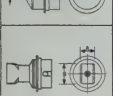
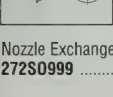
Great for difficult repairs on circuit boards with fine-pitch components with a large number of leads. Handles most ground planes and multi layer boards. Automatic preheat/soak/reflow temperature/time profile increases productivity and quality of your rework jobs. Bright, clear LCD for easy reading of the parameter settings. **Specs:** Voltage: 120V; Temperature Range: 122°F–1022°F (50°C–550°C); Air Flow Volume: 5–50 l/min. HAP3 Hot Air Pencil and nozzle have built in vacuum pick up. When pencil is placed in stand, unit switches into standby mode and operates at the lower pre-heat temperature and airflow rate. Pre-heat holder fixes PCB boards up to 12.20" x 12.60" (310 x 320mm) in the x-y direction. In combination with the preheat plate, they reduce thermal damage by heating board from two directions. Temperature Range: 122°F – 752°F (50°C – 400°C)

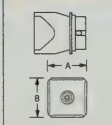
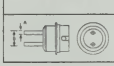
Hot air station with HAP3 hot air pencil, stop and go stand, board holder and pre-heat plate, 120V
No. 272SO3300 (WHA3000PS) **$5,515.78**

Hot air station with HAP3 hot air pencil, stop and go stand, 120V
No. 272SO3100 (WHA3000P) **$2,042.88**

Pre-heat plate with digital temperature readout
No. 272SO3395 (WHP3000) **$1,021.44**

Nozzles and Accessories for WHA900 & WHA3000 Hot Air Systems

Nozzle	TT No.	Weller No.	Dimensions Inch (mm) A	Dimensions Inch (mm) B	PRICE
	272TI688	0058736881	0.098 (2.50)	–	$68.56
	272TI867	0058736867	0.157 (4.00)	–	$68.56
	272TI870	0058736870	0.276 (7.00)	–	$68.56
	272TI840	0058736840	0.583 (4.80)	0.846 (21.50)	$68.56
	272TI842	0058736842	0.394 (10.00)	0.551 (14.00)	$68.56
	272TI843	0058736843	0.421 (10.70)	0.421 (10.70)	$68.56
	272TI841	0058736841	0.472 (12.00)	0.748 (19.00)	$68.56

Nozzle	TT No.	Weller No.	Dimensions Inch (mm) A	Dimensions Inch (mm) B	PRICE
	272TI839	0058736839	0.433 (11.00)	0.433 (11.00)	$68.56
	272TI818	0058736818	0.583 (14.80)	0.583 (14.80)	$71.41
	272TI814	0058736814	0.709 (18.00)	0.709 (18.00)	$71.41
	272TI807	0058736807	0.807 (20.50)	0.807 (20.50)	$71.41
	272TI804	0058736804	1.024 (26.00)	1.024 (26.00)	$71.41
	272TI833	0058736833	1.260 (32.00)	1.260 (32.00)	$89.55
	272TI838	0058736838	0.394 (10.00)	0.394 (10.00)	$68.56
	272SO6883	0058736883	0.098 (2.50)	0.374 (9.50)	$68.56

Nozzle Exchange Tool
272SO999 .....**$36.16**

Hot Air Pencil Stand
272SO599 .....**$91.39**

Hot Air Nozzle Rack
272SO4899 .....**$47.46**

HAKKO Solder Stations

Hakko FX-951 Soldering Station

The next generation of cutting-edge soldering stations from Hakko. Compact, space-saving unit features superior heat transfer and rapid thermal recovery. Lockout key card prevents unauthorized changes to temperature settings. Low temperature alarm warns of potential cold joints. Temperature range: 200-450°C (400-840°F). Sleep mode with 0-29 minute temperature set back. Auto power shutoff after 30 minutes. Uses quick-change composite tips.

Includes: FX951-66 soldering station, FM-2027 handpiece with green grip, FH200-01 sleep mode stand, 599B tip cleaner, key card, heat pad, tip tray, stand and power cords.
No. 821S09516 .....**$249.97**

RoHS Compliant

SEE PAGE 10 FOR MORE HAKKO ACCESSORIES!

Hakko FM-203 ESD-Safe Dual Port Soldering Station

All the features of the FX-951 with more functionality. Two ports allow for the addition of a second soldering iron, parallel remover or desoldering tool. Process control lets you select any soldering temperature you want without changing the tip – one tip, any temperature. Sleep mode with 0-29 minute temperature set back. Auto power shut off after 30 minutes. Temperature range: 200-450°C (400-840°F), temperature accuracy within ±15°C. LED in handpiece tells operator iron is hot. No calibration necessary.

Single handpiece version
Includes: FM203-01 soldering station, FM-2027 handpiece with green grip, FH200-01 sleep mode stand, 599B tip cleaner, key card, heat pad, tip tray, stand and power cords.
No. 821S0203 .....**$499.97**

Double handpiece version
Includes: FM203-01 soldering station, 2 FM-2027 handpieces – 1 green grip, 1 yellow grip, 2 FH200-01 sleep mode stands, 2 599B tip cleaners, 2 heat pads, key card, tip tray, 2 stand cords, power cord. (Not Shown)
No. 821S02037 .....**$549.97**

FM/FX Accessories - Locking Sleeve Assembly
Anti-bacterial formula on sleeve minimizes the spread of germs from multiple users. Green sleeve ideal to indicate lead-free applications.

No. 821S03216 Yellow **$5.27**
No. 821S03217 Orange **$5.27**
No. 821S03218 Blue **$5.27**

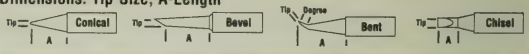
Ideal for Lead-Free areas:
No. 821S03219 Green **$5.27**

RoHS Compliant

Tips for Hakko FX & FM Series Stations

Tip	TT No.	Model No.	Shape	Dims. mm (in.) Tip	Dims. mm (in.) A (Length)	PRICE
	821S0549	T15-BCF1	45° Bevel	ø1 (0.04)	11.5 (0.45)	$9.97
	821S0547	T15-C1	60° Bevel	ø1.0 (0.04)	12.0 (0.47)	$15.97
	821S0557	T15-C4	45° Bevel	ø4 (0.16)	11.5 (0.45)	$9.97
	821S0558*	T15-CF4	45° Bevel	ø4 (0.16)	11.5 (0.45)	$9.97
	821S0533	T15-D08	Chisel	ø0.8 (0.03)	9.5 (0.37)	$9.97
	821S0534	T15-D12	Chisel	ø1.2 (0.05)	10.0 (0.39)	$9.97
	821S0535	T15-D16	Chisel	ø1.6 (0.06)	10.0 (0.39)	$9.97
	821S0536	T15-D24	Chisel	ø2.4 (0.09)	10.0 (0.39)	$9.97
	821S0537	T15-D32	Chisel	ø3.2 (0.13)	5.0 (0.2)	$9.97
	821S0538	T15-D4	Chisel	ø4 (0.16)	7.5 (0.3)	$9.97
	821S05391	T15-D52	Chisel	ø5.2 (0.2)	8.0 (0.31)	$9.97
	821S0542	T15-I	Conical	R0.2 (0.008)	9.5 (0.37)	$15.97

Dimensions: Tip-Size; A-Length



Tip	TT No.	Model No.	Shape	Dims. mm (in.) Tip	Dims. mm (in.) A (Length)	PRICE
	821S0544	T15-J02	30° Bent	R0.2 (0.008)	12.0 (0.47)	$15.97
	821S0510	T15-JD16	30° Bent Chisel	1.6 (0.06)	4.5 (0.18)	$15.97
	821S0545	T15-JL02	30° Bent	R0.2 (0.008)	9.3 (0.37)	$15.97
	821S0546	T15-JS02	30° Bent	R0.2 (0.008)	7.9 (0.31)	$15.97
	821S05700	T15-K	45° Knife	ø4.7 (0.19)	15.0 (0.50)	$15.97
	821S0559	T15-KF	45° Knife	ø4.6 (0.18)	17.0 (0.67)	$15.97
	821S0560	T15-KL	45° Knife	ø4.7 (0.19)	11.0 (0.43)	$15.97
	821S0561	T15-KU	45° Knife	ø3 (0.12)	11.0 (0.43)	$15.97
	821S05400	T15-DL4	Long Chisel	ø4 (0.16)	22.0 (0.87)	$15.97
	821S0543	T15-IL	Conical	R0.2 (0.008)	12.7 (0.5)	$15.97
	821S0507	T15-BLL	Long Conical	R0.2 (0.01)	15.0 (0.59)	$15.97

** Tinned on the soldering surface only. • More Tips Available - CALL!*

TECHNI-TOOL Tomorrow's Products Shipped Today
Phone: 1-800-832-4866 or 1-610-941-2400

HAKKO Solder Stations

Hakko FM-204 Soldering/Desoldering Station

Single-port station with built-in vacuum pump for soldering or desoldering operations. Includes the lightweight FM-2024 handpiece that converts from a gun to a pencil-style iron by simply removing the handle. Sleep mode with 0-29 minute temperature set back. Auto power shut off after 30 minutes. Temperature range: 200-450°C (400-840°F), temperature accuracy within ±15°C.

Single handpiece version: includes FM204-01 station, FM2024-02 desoldering tool, FH200-05 sleep mode stand, 599B tip cleaner, filter pipe assembly, cleaning drill, nozzle remover, ceramic paper filter, key card, stand, tip stand and power cords.
No. 821S02041 .....**$649.97**

Double handpiece version: includes FM204-01 station, FM2024-02 desoldering tool and FH200-05 sleep mode stand, FM-2027 handpiece with yellow grip and FH200-01 sleep mode stand, 2 599B tip cleaners, heat pad, tip tray, filter pipe assembly, cleaning drill, nozzle remover, ceramic paper filter, key card, 2 stand cords, power cord.
No. 821S02042 (Not Shown) **$699.97**

HAKKO Accessory for FM-203

Hakko FM-2024 Desoldering Tool

Tool's detachable handle combines the high out-put of a gun-style handpiece with the convenience of a pencil iron. Meets the demands of lead-free soldering. Uses disposable, easy-to-change solder collection filters. **Includes:** desolder gun and handle, desoldering control box, FH200-05 sleep mode stand, 599B tip cleaner, cleaning drill, nozzle remover, ceramic filter, stand cord. Requires shop air.
No. 821S02242 (FM2024-21) **$449.97**

SEE PAGE 10 FOR MORE HAKKO ACCESSORIES!

FM-2024 Nozzles

TT No.	Model	I.D.	O.D.	PRICE
821S02436	N3-06	0.6mm	1.9mm	$59.97
821S02438	N3-08	0.8mm	2.0mm	$49.97
821S02430	N3-10	1.0mm	2.2mm	$49.97
821S02433	N3-13	1.3mm	2.6mm	$49.97

TT No.	Model	I.D.	O.D.	PRICE
821S0316	N3-16	1.6mm	3.0mm	$49.97
821S02434	N3-20	2.0mm	3.4mm	$49.97
821S02482	N3-23	2.3mm	3.8mm	$49.97
821S02432	N3-L10	1.0mm	2.3mm	$59.97

Tips for Hakko FX & FM Series Stations

Tip	TT No.	Model No.	Shape	Dims. mm (in.) Tip	Dims. mm (in.) A (Length)	PRICE
	821S05603	T15-1603	Chisel	ø1.5 (0.08)	17.0 (0.67)	$15.97
	821S05605	T15-1605	30° Bent Chisel	1.0 (0.04)	19.0 (0.75)	$15.97
	821S05401	T15-B	Conical	R0.2 (0.008)	7.5 (0.3)	$9.97
	821S01541	T15-B2	Conical	R0.5 (0.02)	10.0 (0.39)	$9.97
	821S0548	T15-BC1	45° Bevel	ø1 (0.04)	11.5 (0.45)	$9.97
	821S0550	T15-BC12	60° Bevel	ø1.2 (0.05)	15.0 (0.59)	$15.97
	821S0551	T15-BC15	60° Bevel	ø1.5 (0.06)	17.0 (0.67)	$39.97
	821S0652	T15-BC2	45° Bevel	ø2 (0.08)	11.5 (0.45)	$9.97
	821S01528	T15-BC28	60° Bevel	ø2.8 (0.11)	17.6 (0.69)	$39.97
	821S0555	T15-BC3	45° Bevel	ø3 (0.12)	10.0 (0.39)	$9.97

Dimensions: Tip-Size; A-Length

Tip	TT No.	Model No.	Shape	Dims. mm (in.) A (ID)	Dims. mm (in.) B	Dims. mm (in.) C	PRICE
	821S01567	T15-1001	Tunnel	5.1 (0.2)	4.5 (0.18)	4.6 (0.18)	$41.67
	821S0568	T15-1002	Tunnel	5.1 (0.2)	4.5 (0.18)	10.4 (0.41)	$41.67
	821S0571	T15-1005	Tunnel	9.5 (0.37)	5.5 (0.22)	13.2 (0.52)	$41.67
	821S0585	T15-1402	Spatula	2.0 (0.08)	7.2 (0.28)	15.7 (0.62)	$82.97
	821S0516	T15-1401	Spatula	2.0 (0.08)	7.2 (0.28)	10.4 (0.41)	$82.97
	821S05403	T15-1403	Spatula	2.0 (0.08)	7.2 (0.28)	21.2 (0.83)	$82.97

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.
We reserve the right to correct misprints.

HAKKO Accessories for FX-951, FM-203, FM-204

Hakko FM-2022 SMD Parallel Remover

Uses revolutionary parallel action between tip ends (one tips remains stationary) to provide more surface contact between tips and component to make heat transfer more even and efficient. For easy removal of SMD chips and flat packs up to 25mm. Requires FM-203 station. **Includes:** FM2022-02 tweezer handpiece, FH200-03 sleep mode stand, cleaning sponge, heat pad, stand cord.
No. 821SO2225 (FM2022-05) **$249.97**

FM-2022 SMD Parallel Remover Tips

Tip	TT No.	Model	Type	PRICE/Pr.
	821SO6601	T16-1001	Chip 0.5I	$69.97
	821SO6602	T16-1002	Chip 0.5C	$69.97
	821SO6603	T16-1003	Chip 1L	$69.97
	821SO6604	T16-1004	Chip 2L	$69.97
	821SO6605	T16-1005	SOP 6L	$69.97
	821SO6606	T16-1006	SOP 8L	$69.97
	821SO6607	T16-1007	SOP 10L	$89.97
	821SO6608	T16-1008	SOP 13L	$89.97
	821SO6609	T16-1009	SOP 16L	$89.97
	821SO6610	T16-1010	SOP 20L	$89.97
	821SO6611	T16-1011	SOP 25L	$89.97
	821SO6612	T16-1012	SOP 18L	$89.97

RoHS Compliant

Hakko FM-2023 Mini Parallel Remover

Remove and place surface mount chips as small as .0201 caps safely and easily. Flip switch for standard or reverse tweezer action. Requires FM-203 station.
Includes: FM2023-02 tweezer handpiece, T9-I tip, FH200-04 sleep mode stand, cleaning sponge, heat pad, stand cord.
No. 821SO2234 (FM2023-05).....**$274.97**

FM-2023 Mini Parallel Remover Tips

Tip	TT No.	Model	Chip Type	Size	PRICE/Pr.
	821SO1123	T9-I	I	R0.2mm (0.008")	$59.97
	821SO2123	T9-L1	1L	1mm (0.04")	$59.97
	821SO3123	T9-L2	2L	2mm (0.08")	$59.97

Replacement Parts

FM-2027 soldering pencil with yellow sleeve, FH200-01 sleep mode stand, 599B tip cleaner, heat pad, cord.
No. 821SO2273 .....**$114.97**

FM-2027 sleep mode stand, 599B tip cleaner
No. 821SO2001 .....**$60.17**

FM-2022 sleep mode stand, sponge
No. 821SO2003 .....**$71.27**

FM-2023 sleep mode stand, sponge
No. 821SO2004 .....**$63.47**

FM-2024 sleep mode stand, 599B tip cleaner
No. 821SO2005 .....**$76.17**

HAKKO Accessories for FR-800 Series Hot Air Stations

Boom Stand Fixture

Adjustable stand for FR-801, FR-802, and FR-803B hot air handpiece. Ideal accessory for FR-1012 IR pre-heater. 22" reach. smooth movement. 2" fine vertical adjustment over 12" of fast vertical movement.
Includes: Base; Adjustable arm; Handpiece holder; Handpiece adapter sleeve.
No. 821SO224 .....**$699.97**
Shown with IR-Preheater No. 821SO1012. Sold Separately.

FR-1012 Infrared Board Preheater

Elevates temperature of PCB assemblies so components can be soldered more easily and with improved results. Great on medium to high-mass board assemblies, which can heat sink a significant amount of energy from a soldering iron tip, or handheld hot air tool. Ideal when soldering lead-free assemblies. Choose from power mode, which lets you set output manually, or thermocouple mode, which sets and maintains a specific PCB temperature automatically. **Includes:** Preheater; infrared heater lamp, 500W; Type K 36 Ga. thermocouple.
No. 821SO1012.....**$1,499.97**

RoHS Compliant

Specifications:

Board capacity: 12" x 15"
Heated Area: 10" x 12"
Heater watts: 1,200W
Heater type: Low mass quartz I/R
Controller: Microprocessor

HAKKO

The latest generation in hot air tools!

Hakko Hot Air Stations

Hakko FR-801

Effective and economical hot air tool for soldering and desoldering SMDs. **Features:** New nozzle outlet provides consistent hot air temp; Air flow meter; Automatic cool-down mode for safety. *(Nozzles sold separately.)*
A. No. 821SO801 .....$599.97

Hakko FR-802

Digital SMD hot air rework station with process control. **Features:** Digital temperature display; Air flow adjustment; Self-contained air source; Automatic cool-down mode for safety. *(Nozzles sold separately.)*
B. No. 821SO802.....$849.97

Hakko FR-803B

Hot air rework system enables registration of temperature profiles. **Features:** 50 different 3-stage profiles can be saved into memory with temperature control from 208-930°F; Special port allows connection of FR-820 pre-heater and automatic starts when cycle begins; Digital control and display of time and temperature; Display of air flow rate; Manual and automatic modes; Built-in vacuum pick-up. *(Nozzles sold separately.)*
C. No. 821SO8032 .....$1,299.97

D. Omnivise. Holds boards safely. Unique design allows 360° use. 5 adjustable heights. Accommodates any board size.
No. 821PR139 (C1390C).....**$59.57**

E. Rework Fixture. Rack and pinion action for smooth vertical motion. Makes repetitive component removal and installation simple.
No. 821PR393 (C1392B) **$724.87**

F. FR-820 Preheater. Compact solution to pre-heating printed circuit boards. Delivers consistent heat. Ideal for lead-free assemblies. Closed loop temperature control between 302°-572°F (150°C-300°C).
No. 821SO820.....$329.57

Nozzles for FR Series Hot Air Stations

Tip	TT No.	Suggested Application	Tip Size A (mm) x B (mm)	PRICE/ Each
	821TI124	Single	2.5mm (ID)	$20.07
	821TI857	Single	4.4mm (ID)	$19.87
	821TI144	Dual Single	2.5mm x 7.2mm (ID)	$210.47
	821TI325	Dual Single	0.15mm (ID)	$210.47
	821TI1142	Bent Single	1.5mm x 3mm x 45°	$73.27
	821TI1180	BQFP	17mm x 17mm	$210.47
	821TI1182	BQFP	24mm x 24mm	$175.77
	821TI183	SOJ	15mm x 8mm	$210.47
	821TI184	SOJ	18mm x 18mm	$175.77
	821TI1185	TSOL	13mm x 10mm	$210.47
	821TI1186	TSOL	18mm x 10mm	$210.47
	821TI1187	TSOL	8mm x 18.5mm	$175.77
PLCC	821TI135	PLCC (44)	17.5mm x 17.5mm	$175.77
	821TI136	PLCC (52)	20mm x 20mm	$175.77
	821TI137	PLCC (68)	25mm x 25mm	$175.77
	821TI138	PLCC (84)	30mm x 30mm	$175.77
	821TI1141	PLCC	11.5mm x 14mm	$175.77
	821TI188	PLCC (20)	10mm x 10mm	$175.77
	821TI1180	BQFP (28)	17mm x 17mm	$210.47

Tip	TT No.	Suggested Application	Tip Size A (mm) x B (mm)	PRICE/ Each
	821TI147	SIP	25.5mm x 1mm	$210.47
	821TI145	SIP	52mm x 1mm	$210.47
	821TI125	QFP	10mm x 10mm	$175.77
	821TI126	QFP	15.2mm x 15.2mm	$71.47
	821TI127	QFP	19.2mm x 19.2mm	$175.77
	821TI128	QFP	14mm x 20mm	$142.97
	821TI129	QFP	28mm x 28mm	$175.77
	821TI1203	QFP	35mm x 35mm	$210.47
	821TI261	QFP	20v x 20mm	$175.77
	821TI1262	QFP	12.2mm x 12.2mm	$175.77
	821TI1263	QFP	27.9mm x 39.9mm	$210.47
	821TI1264	QFP	40.4mm x 40.4mm	$210.47
QFP	821TI1265	QFP	32.2mm x 32.2mm	$175.77
	821TI858	SOP	4.8mm x 10mm	$175.77
	821TI8509	SOP	5.7mm x 15mm	$175.77
	821TI8501	SOP	7.2mm x 16mm	$175.77
	821TI861	SOP	7.2mm x 19mm	$175.77
	821TI1258	SOP	10mm x 8mm	$210.47
	821TI267	SOP	21mm x 11.7mm	$175.77
	821TI1259	SOP	29mm x 13.5mm	$175.77
SOP	821TI1260	SOP	19mm x 8.7mm	$175.77

UNMATCHED PRODUCT SELECTION
FROM MORE THAN 500 TOP MANUFACTURERS

HAKKO Desoldering/Rework Stations

472D Desoldering Stations

- Output circuit is isolated from power input and insulated transformer
- Control card locks settings
- Zero crossover switching on motor

Use the control card to enter temperature settings into system memory. When card is removed, all parameters and settings are locked in. Provides strict process control and guards against operator error. **Specs:** 100 watts; 24V AC output voltage; Double cylinder type vacuum pump; 80 kPa (600 mm/Hg) vacuum pressure.

Available with your choice of a pencil or gun!

Best Seller

472D Desoldering Station with 817 Desoldering Gun (Shown)
No. 821S04722 (472D-02) **$525.37**

472D Desoldering Station with 807 Soldering Pencil
Includes 807 pencil-style desoldering tool with powerful suction power; cleaning pins for nozzles and heating element, spring filter – 3/pk, 4 large and 2 small ceramic paper filters; control card.
No. 821S04721 (472D-01) **$525.37**

RoHS Compliant

472D Station Desoldering Pencils & Guns

TT No.	A. 821S0256*	B. 821AC910
Model/Type	817 Gun	807 Pencil
Power Consumption	24V AC/60W	24V AC/60W
Temperature	350°C–450°C (662°F–842°F)	350°C–450°C (662°F–842°F)
Nozzle to Ground Resistance	Under 2	Under 2
Nozzle to Ground Potential	Under 2 mV	Under 2 mV
Standard Nozzle	A1003	A1003
Wt. (w/o cord, hose)	Approx. 180 g (0.39 lbs.)	Approx. 150 g (0.35 lbs.)
PRICE	$239.07	$239.07

**Any station that uses the 807 iron (821AC910) can operate the 817 (821S0256).*

Nozzles	TT No.	Model No.	A	B	PRICE/Ea.
	821MI005	A1002	0.03"	0.7"	$14.37
	821MI1003	A1003	0.04"	0.08"	$14.37
	821TI393	A1393	0.04"	0.055"	$14.37
	821TI274	A1395	0.05"	0.083"	$14.37
	821TI1004	A1004	0.03"	0.09"	$14.37
	821S0005	A1005	0.04"	0.1"	$14.37
	821TI1006	A1006	0.05"	0.12"	$14.37
	821TI1007	A1007	0.06"	0.12"	$14.37
	821TI806	A1396	0.09"	0.15"	$14.37
	821TI394	A1394	0.04"	0.083"	$14.37

Accessories

Cleaning pin for .03 in. (.8mm) nozzle
No. 821MI240 (B1086) **$3.77**

Cleaning pin for .04 in. (1.0mm) nozzle
No. 821S01087 (B1087).....**$3.77**

Cleaning drill for 04 in. (1.0mm) nozzle
No. 821FI1303 (B1303).....**$13.27**

471-2 station small ceramic paper filters - 10/pk
No. 821MI1009 (A1009).....**$5.87**

471-2 station large ceramic paper filters - 10/pk
No. 821MI033 (A1033).....**$9.07**

472-D station spring filters – 10/pk
No. 821MI1030 (A1030) **$10.97**

802 gun heating element
No. 821PA029 (A1029) **$46.87**

802 gun filter pipe with front holder ,spring filter and large ceramic paper filter
No. 821PA128 (B1128) **$10.97**

807 pencil heating element
No. 821PA174 (A1174).....**$64.87**

807 pencil filter pipe with front holder, spring filter and large ceramic paper filter
No. 821AC517 (B2517) **$11.57**

HAKKO FR-1418 BGA Rework Station

Low cost, flexible system for alignment and placement or removal of surface mount components. Features include a Gantry style construction which keeps the PCB stationary and moves the head to accomplish X, Y, Z and Theta alignment. Top heater is integrated into placement head. Bottom heater is a large area, low mass infrared heater that provides fast, efficient heating. PC with flat panel monitor for running included thermal analysis and control software.

CALL FOR PRICING!

Board Handling Capacity:

- 2" x 2" minimum recommended board size
- 14" x 18" maximum recommended board size (larger board capacity possible with optional fixturing)
- 0.25" maximum PCB thickness

Component Handling Capacity:

- 0.08" (2.0mm) square minimum recommended component size
- 2" (51 mm) square maximum recommended component size
- Handles both grid array and leaded type components – BGA, CGA, QFP, LCC, TSOP, etc.
- 2" maximum component height
- Placement accuracy to ±0.001"

Part No.	FR1418-01	FR1418-02	FR1418-03	FR1418-04
TT No.	821S04181	821S04182	821S04183	821S04184
Power Consumption	120VAC, 15A	120VAC, 20A	120VAC, 15A	120VAC, 20A
Preheater, low mass IR	750W Single Zone 10" x 12" Proportional control 20-100%	1500W Dual Zone 20" x 12" Proportional control 20-100%	750W Single Zone 10" x 12" Proportional control 20-100%	1500W Dual Zone 20" x 12" Proportional control 20-100%
Top heater, forced convection hot/gas	1000W	1000W	1000W	1000W
Z-Axis control	Manual	Manual	Automatic	Automatic

 Nozzles and accessories available, Call 800-832-4866 for more details!

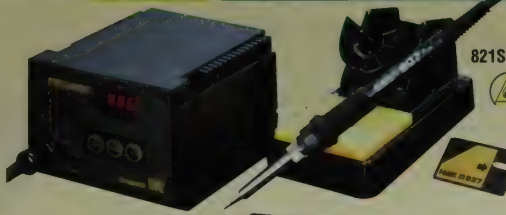
HAKKO 900 Series Soldering Stations

RoHS Compliant

936/937 Soldering Stations

Economical choice for general use soldering. These stations are compact and stackable for more workbench room. They feature thin grip irons for comfort and control. The lock screw (936 Model) or keycard (937 Model) prevent unwanted temperature setting changes. Both versions are ESD safe and include 907 ESD M-style handpiece and workstand. **Specs:** 60W; Temperature range: 392 - 896°F (200 - 480°C); Temp. stability: ±1.8°F (1.0°C). (Japan).

No. 821ST927 (937-5) 937 Digital Soldering Station **$210.47**
No. 821ST612 (936-12) 936 Soldering Station **$93.77**



936/937 Irons and Accessories

900S ESD S-type iron. Small for micro soldering
No. 821IR903 .....**$80.27**

907 ESD M-type iron. Medium for standard soldering
No. 821S0148.....**$80.27**

908 ESD L-type iron. Large for heavy duty soldering
No. 821S01150.....**$88.67**

S-type iron replacement element
No. 821AC322 (A1322) **$18.47**

M-type & L-type iron replacement element
No. 821S0263 (A1321) **$18.47**

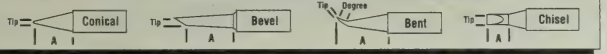
Replacement cleaning sponge
No. 821AC042 (A1042) **$3.37**

950 SMD Hot Tweezer

Delivers direct heat to components to prevent damage to surrounding components. Removes SMD chips and flat packs up to 25mm. Collet allows easy replacement of tips. Compatible with Hakko 936, 937, 939, 703, 926, 927 and 928 stations. **Specs:** Temp: 200-400°C (392-752°F); Power consumption: 24VAC/50W; Tip to ground resistance: Under 2 ohms; Tip to ground potential: Under 2mV (Typ. 0.6mV); Heating element: Ceramic heater; 186mm (7.3") OAL. 1.2m (4') cord. (Iron holder included).
No. 821S0951 .....**$178.17**

Tips for 900 Series Irons

Dimensions: Tip-Size; A-Length



Tip	TT No.	Model No.	Shape	Dims. mm (Inch) Tip	Dims. mm (Inch) A	PRICE
S-Type Iron Tips						
	821TI003	900S-T-1.2D	Chisel	1.2 (.047)	17 (.670)	$7.47
	821TI277	900S-T-1.6D	Chisel	1.6 (.063)	17 (.670)	$7.47
	821TI902	900S-T-1C	Bevel	1.0 (.040)	15 (.591)	$7.47
	821TI911	900S-T-B	Conical	.5r (.020)	17 (.670)	$7.47
	821TI908	900S-T-I	Conical	.2r (.008)	17 (.670)	$7.47
M-Type Iron Tips						
	821TI200	900M-T-0.2RB	30° Bent Conical	.2 (.01)	15 (.591)	$8.97
	821TI905	900M-T-0.5C	Bevel	.5 (.020)	15 (.591)	$7.07
	821TI888	900M-T-0.8C	Bevel	.8 (.031)	17 (.670)	$7.07
	821TI008	900M-T-0.8D	Chisel	0.8 (.032)	17 (.670)	$6.27
	821TI012	900M-T-1.2D	Chisel	1.2 (.047)	17 (.670)	$5.37
	821TI120	900M-T-1.2LD	Long Chisel	1.2 (.047)	25 (.984)	$6.17
	821TI050	900M-T-1.6D	Chisel	1.6 (.063)	17 (.670)	$5.37
	821TI180	900M-T-1.8H	25° Bent Chisel	1.8 (0.71)	14 (.551)	$6.07
	821TI062	900M-T-1C	Bevel	1.0 (.040)	15 (.591)	$6.07
	821TI052	900M-T-2.4D	Chisel	2.4 (.095)	17 (.670)	$5.37
	821TI064	900M-T-2C	Bevel	2.0 (.079)	17 (.670)	$5.37
	821TI907	900M-T-2LD	Long Chisel	2.0 (.079)	25 (.984)	$6.07
	821TI054	900M-T-3.2D	Chisel	3.2 (.126)	17 (.670)	$5.37
	821TI000	900M-T-4C	Bevel	4.0 (.158)	17 (670)	$5.37
	821TI058	900M-T-B	Conical	.5r (.020)	17 (.670)	$5.37
	821TI912	900M-T-H	25° Bent Chisel	3.5 (.138)	19 (.748)	$5.97
	821TI068	900M-T-I	Conical	.2r (.008)	17 (.670)	$6.37
	821TI066	900M-T-K	Knife	5.0 (.197)	15 (.591)	$9.17
	821TI060	900M-T-LB	Long Conical	.2r (.008)	25 (.984)	$6.17
	821TI007	900M-T-R	Slot	3.2 (.126)	17 (.670)	$8.17

Tip	TT No.	Model No.	Shape	Dims. mm (Inch) Tip	Dims. mm (Inch) A	PRICE
M-Type Iron Tips						
	821TI930	900M-T-S3	Chisel	5.2 (.205)	19 (.748)	$8.17
	821TI904	900M-T-S4	Special	.2r (.008)	15 (.591)	$6.37
	821TI006	900M-T-S6	Bevel	1.3 (.050)	17 (.670)	$5.37
	821TI302	900M-T-S8	Long Conical	.5r (.020)	35 (1.38)	$17.27
	821TI301	900M-T-S9	Special	1.0 (.040)	16 (.630)	$6.27
	821TI091	900M-T-SI	Thin Conical	.2r (.008)	13 (.512)	$6.67
L-Type Iron Tips						
	821TI016	900L-T-1.6D	Chisel	1.6 (.063)	20 (.788)	$8.97
	821TI024	900L-T-2.4D	Chisel	2.4 (.095)	20 (.788)	$6.07
	821TI092	900L-T-2B	Conical	2.0 (.079)	20 (.788)	$6.07
	821TI032	900L-T-3.2D	Chisel	3.2 (.126)	20 (.788)	$6.07
	821TI420	900L-T-B	Conical	.5r (.020)	20 (.788)	$6.07
	821TI002	900L-T-I	Conical	.2r (.008)	20 (.788)	$6.07
	821TI901	900L-T-K	Knife	5.0 (.197)	18 (.709)	$10.07
	821TI906	900L-T-LB	Conical	.2r (.008)	25 (.984)	$8.87
	821TI909	900L-T-S1	Chisel	5.6 (.221)	19 (.748)	$8.07

950 SMD Hot Tweezer Tips

TT No.	Model	Description	Dimensions - mm (in.)	PRICE/Ea.
821TI378	A1378	Chip 2L	2.0 x 1.0 (0.08 x 0.04)	$50.87
821TI379	A1379	Chip 1L	1.0 x 1.0 (0.04 x 0.04)	$50.87
821TI388	A1388	Chip 0.5C	1.5 x 0.5 (0.06 x 0.02)	$50.87
821TI389	A1389	Chip 0.51	R0.25 (R0.1)	$50.87
821TI391	A1391	SOP 6L	6 x 1.0 (0.24 x 0.04)	$50.87
821TI380	A1380	SOP 8L	8.0 x 1.0 (0.31 x 0.04)	$50.87
821TI381	A1381	SOP 10L	10.0 x 1.0 (0.39 x 0.04)	$51.57
821TI382	A1382	SOP 13L	13.0 x 1.0 (0.51 x 0.04)	$53.37
821S0392	A1392	SOP 15L	15.0 x 1.0 (0.59 x 0.04)	$53.37

PACE worldwide MBT SMT/Thru-Hole Assembly and Repair Systems

MBT FEATURES

- Multi-channel system powers up to 3 handpieces at the same time at different temperatures
- Auto tip temperature offset compensation system sets and displays true tip temperature
- Rapid temperature recovery setback automatically reduces tip temperature to 350°F/177°C after 10-90 minutes. Manual mode allows you to put all channels into setback.
- Digital readouts display temp, error codes and status for each channel
- Static dissipative, ergonomic handles for added safety and comfort
- F°/C° selector key displays set and operating temperatures in either Fahrenheit or centigrade
- Keyboard entry microprocessor control lets you enter system settings on a user-friendly keyboard with audible feedback
- SensaTemp closed-loop temperature management delivers the power and control your need
- Air flow controls for ThermoJet handpiece provide maximum flexibility
- Auto Snap-Vac delivers vacuum pressure in seconds when you push handpiece switch
- Key lock option prevents unauthorized recalibration or alteration of settings.
- Tip & temperature selection charts makes choosing the right tips and temperatures easy

Choose the system that's right for you:

MBT 350 Dual Technology Rework System
Now you can get two heating technologies in one unit. The MBT 350 allows either SensaTemp or TempWise handpieces to be plugged into any of 3 continuously active channels. A temperature range can be programmed into the unit allowing operator flexibility without access to the entire heat range. Setback and Auto-Off features extend tip life and reduce operating costs. Includes vacuum/pressure pump for desoldering. **Specs:** Power Requirements: 120VAC, 60 Hz (240 watts max); Tip to ground resistance: < 2Ω; Set Temperature Range: 37-482°C (100-900°F) SensaTemp, 205-454°C (400-850°F) TempWise; Can be used with 8 different handpieces. **Includes:** (A) TD-100 Thermo-Drive Iron, (B) MT-100 MiniTweez, (D) SX-90 Heavy-Duty Sodr-X-Tractor.
No. 612SO454 (8007-0454) **$1,400.40**

MBT 301 2-channel Soldering and Rework Unit
Multi-technology system with two individually-controlled channels.
Includes: (D) SX-90 Sodr-X-Tractor and (A) TD-100 iron.
No. 612SO301 (8007-0478) **$1,108.60**

MBT-250-SDPT – 4 handpieces
Comes complete with power supply, accessory kit, VisiFilter, tip and tool holders, tip maintenance station, instruction manual and 4 handpieces: (D) SX-80 Sodr-X-Tractor® desoldering handpiece for thru-hole components; (F) TP-65 ThermoPik with integral vacuum pickup for reflow and removal of PQFPs; (G) PS-90 soldering iron for small SMDs as well as heavy thru-hole soldering; (H) TT-65 ThermoTweez high power reflow tweezer for SMD removal. 115VAC, 50/60Hz, 185W, meets MIL-STD-2000A.
No. 612PA250 (P/N 8007-0206).....**$1,995.00**

MBT-250-SD – 2 handpieces
Same system as the MBT-250-SDPT but with the (D) SX-80 Sodr-X-Tractor and (G) PS-90 soldering iron.
No. 612PA220 (P/N 8007-0203) **$1,460.10**

IntelliHeat™ Thermal Control System

IntelliHeat™ is the only thermal control system that can run both SensaTemp® and tip-heater cartridge technologies. SensaTemp's® unique heater design minimizes tip temperature overshoot, ensures temperature stability and creates a thermal reservoir you can access instantaneously. Tip replacement requires only tip change. Tip-heater cartridge technology has advanced electronics that provide instantaneous load sensing and on-demand power to quickly reflow solder joints, regardless of the mass of the application. Tip and heater are permanently coupled, ensuring all the heat generated is available for use by the tip. Whichever your preference, you now have a single power source that gives you complete flexibility on lead or lead-free operations.

PACE worldwide Production Soldering Systems

ST 30 & ST 50 Single Channel Systems

Features:

- IntelliHeat™ Control Technology
- °C/°F Temperature Scales
- Temperature Adjustment Lockout
- ESD grounding jack
- ESD Safe metal housing
- Stackable
- Can be mounted under workbench or shelf with optional bracket

Improves quality, reduces costs and eliminates the maintenance and calibration hassles associated with other systems. The heavy-duty metal housing makes this system the ideal choice for the harshest environments and the sloped face of the front panel is a standard feature for ease of use. An optional mounting bracket is available to mount the system under a workbench or shelf, preserving precious benchtop space. Packaged with the TD-100 ThermoDrive or PS-90 universal soldering iron. *Tips sold separately.*

ST 30 with TD-100 ThermoDrive Soldering Iron
No. 612S00499 .....$205.00

ST 50 with TD-100 ThermoDrive Soldering Iron
No. 612S00500 .....$295.00

ST 50 with PS-90 Universal Soldering Iron *(Not Shown)*
No. 612S00532 .....$295.00

ST 70 Single Channel System

Features:

- IntelliHeat™ Control Technology
- Performance level lockout (if Power Module is removed the system is shut down)
- ESD grounding jack
- ESD Safe metal housing
- Stackable
- Supplied with 6.5, 7 & 7.5 Power Modules
- Can be mounted under workbench or shelf with optional bracket

Single channel IntelliHeat™ power supply controlled by interchangeable power modules. Comes with TD-100 ThermoDrive soldering iron, optional Instant SetBack Cubby extends TD-100 ThermoDrive iron tip life, especially beneficial for lead free soldering. *Tips sold separately.*

The ST 70 is the easiest to operate. Simply select the performance level you desire, plug in the appropriate power module and the system takes care of the rest! It improves quality, reduces costs while protecting your process.
No. 612S00504.....$240.00

Power Modules for ST 70 System

Heat Level	Color	TT No.	PRICE
Heat Level 5	Green	612S01201	$10.70
Heat Level 5.5	Blue	612S01202	$10.70
Heat Level 6	Orange	612S01203	$10.70
Heat Level 6.5	Gold	612S01204	$10.70

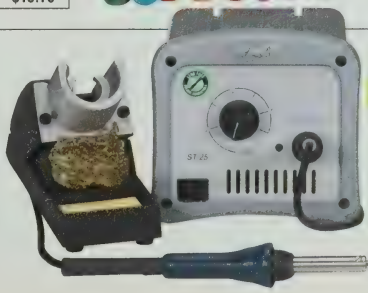
Heat Level	Color	TT No.	PRICE
Heat Level 7	Red	612S01205	$10.70
Heat Level 7.5	Purple	612S01206	$10.70
Heat Level 8	Black	612S01207	$10.70
Heat Level 8.5	Silver	612S01208	$10.70

ST 25 SensaTemp® Rework System

Features:

- Analog (dial) control
- °C/°F dial display
- Temperature lockout

Improves quality, reduce costs and eliminate the maintenance and calibration hassles associated with other soldering systems. Features the PS-90 handpiece (SensaTemp® version), SensaTemp® maximizes heat delivery at low, safe temperatures and eliminates the need for calibration. *Tips sold separately.*
No. 612S0528.....$155.00



PACE worldwide **Rework Systems**

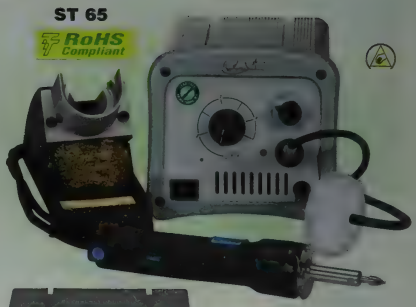
ST 65 Rework System

Features:

- IntelliHeat™ Control Technology
- °C/°F Temperature Scales
- Temperature Adjustment Lockout
- Patented Snap-Vac Technology
- ESD grounding jack
- ESD Safe metal housing
- Stackable
- Can be mounted under workbench or shelf with optional bracket

Single channel, dial control system features the SX-90 Sodr-X-Tractor. Compatible with all IntelliHeat™ handpieces. Featuring a powerful multi-stage venturi powered by your compressed air source, the ST 65 is ideal for applications requiring continuous pressure. A N_2 source can be connected to create an inert gas reflow environment if using a N_2 capable soldering iron.

No. 612SO0502.....$595.00



ST 75 & ST 115 Rework Systems

Features:

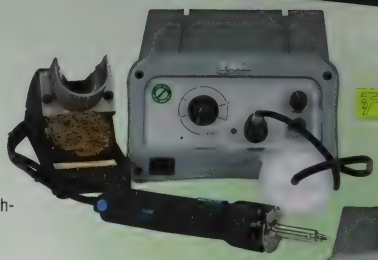
- IntelliHeat™ Control Technology
- Analog (Dial) Control (ST 75)
- Digital Display & Keypad (ST 115)
- °C/°F Temperature Scales
- Temperature Lockout
- Hi-Flo Pump
- Patented Snap-Vac Technology
- ESD grounding jack
- ESD Safe metal housing
- Stackable

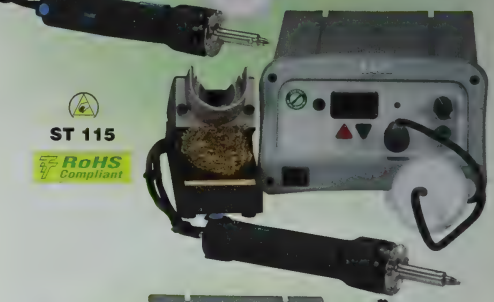
The ST 75 and ST 115 systems let you solder, desolder, remove components with a variety of tweezers and thermo-piks, as well as make use of the high performance, foot-pedal-activated air pencil. Both come standard with Snap-Vac desoldering technology to ensure quick, clean removal of solder from any through-hole joint. The Hi-Flo pump is so powerful you won't lose vacuum in continuous use applications. The new high resolution pressure control valve delivers the widest range of adjustable airflow available on the market today.

These single channel control systems come with the SX-90 Sodr-X-Tractor and is compatible with all IntelliHeat handpieces. *Tips sold separately.*

ST75 Analog Station
No. 612SO0506 .....$650.00

ST 115 Digital Station
No. 612SO0508 .....$750.00





ST 100 Soldering and Rework System

Features:

- IntelliHeat™ Control Technology
- Digital Display & Keypad
- °C/°F Temperature Scales
- Password Lockout
- Temperature SetBack
- AutoOff
- User defined operating temperature range
- ESD grounding jack
- ESD Safe metal housing

Fully programmable 2 channel power supply featuring IntelliHeat™. Supplied with 2 TD-100 ThermoDrive soldering irons. Loaded with features to improve quality, control your process, increase through-put and extend tip life. System allows for 2 soldering irons, 2 MiniTweezers, one of each or a combination with a TP-100 to co-exist on a workbench. An approved unique operating range or process window can be programmed for each handpiece, allowing you the flexibility to do your work, while eliminating the risks associated with having access to the entire temperature range of the system. Backlit digital LCD screen displays temperature of both channels or, with scan mode enabled, cycles through the handpiece channels one at a time displaying set and actual temperatures.

No. 612SO0525.....$565.00

ST 325 & ST 300 Programmable Hot Air Stations

Features:

- Quite-Flo turbine blower delivers nearly silent operation
- Store and recall up to 20 profiles (40 with optional software)
- User definable temperature zone
- Audible cycle countdown timer in timed and program modes
- Multi-level password lock-out prevents unauthorized changes

Self-contained stations for removing or installing SMDs in individual or multiple operations. In manual mode you can control the airflow with the cycle button. In timed mode allows you to create up to 20 different time and temperature profiles to ensure repeatability. Both cycle start and vacuum functions are activated with switches conveniently located on PV-65 vacuum wand. **Specs:** Tip temperature range: 350° to 900°F (176° to 482° C) nominal; Airflow: 5-25 SLPM. **Includes:** Lo-Flo pump and PV-65 vacuum wand. *Nozzles sold separately.*

ST 325 Programmable Digital Hot Air Station
Features on-screen display of time and temperature parameters during operation.
No. 612SO325.....$1,450.00

ST 300 Programmable Analog Hot Air Station
Features dial control for temperature and airflow.
No. 612SO427.....$1,095.00

PACE worldwide

The new generation in Area Array Rework Systems!

ThermoFlo TF 1700 and TF 2700 Area Array Rework Systems

New!

RoHS Compliant

612SO2700

612SO1700

Advanced features and ease-of-use ensure greater acceptance and success. Safely install and remove a wide variety of CSPs, FCs, PBGAs, CBGAs, MLFs, LCCs, and other SMDs. Advanced software enables easy profile creation and guides operators through an intuitive interface that virtually automates the process.

Features: Component pick-up, alignment, placement, and reflow are completed in a single axis, eliminating the risk of component movement after placement. Fine micrometer adjustment on PCB holder for the most delicate X and Y axis alignments. Precise and accurate, within 25 µm (.001"), Z axis movement. Optic system utilizes advanced digital color cameras and the highest quality prism available for amazing image clarity. Combines convective top-side heating with stable and powerful IR bottom-side heating. Both systems are self-contained and do not require an external air supply or vacuum connections.

Model	TF 2700	TF 1700
TT No.	612SO2700	612SO1700
Power Requirements	120 VAC, 60 Hz	
Temp. setting range:		
Top heater	212° to 750°F (100° to 400°C)	
Pre-heater	212° to 430°F (100° to 221°C)	
Max component size:	2.5" x 2.5" (65mm x 65mm)	
Max PCB size:	24" x 24" (610mm x 610mm)	12" x 12" (305mm x 305mm)
Air Flow maximum:	Self-contained. PC controlled, adjust up to 20 SLPM	Self contained, manual adjust, 20 SLPM
Includes	17" integrated color flat panel LCD monitor; Board supports; Optical alignment kit. 5 nozzles and 5 stencils of your choice.	15" integrated color flat panel LCD monitor; Board supports; Optical alignment kit.
PRICE	$35,000.00	$25,000.00

PACE worldwide

IR 3000 BGA Rework System

RoHS Compliant

Unique aperture system controls and precisely applies the heat to the targeted component while protecting adjacent components. Software utilizes PID control algorithms to apply heat and make profiling easy. IR thermal sensor controls process using non contact measuring methods or a standard K type thermocouple mounted on the PCB. An SODR-CAM is available to watch the entire reflow process happen in real time. Fully Area Array capable and can be used to remove and install most SMT (and thru-hole) components. Features 500 watt long wave top heater and 1000 watt long wave bottom heater. Includes one of the best vision overlay placement systems available. **Includes:** Software; 15" flat screen monitor; Component nest; Board holders. **Specs:** Max component size: 2.5" x 2.5" (65mm x 65mm); Max PCB size: 12" x 12" (305mm x 305mm); Resolution on optics adjustment: 0.02" (0.52mm) per rotation; Positioning accuracy (Z axis): ±0.001" (±25 µm; Vacuum: 450mm Hg; Optics: High resolution, Vision overlay system with color camera; Video inputs: 2 Composite (B/C) and 1 "S" Video (For alignment optics).

No. 612SO534.....**$25,000.00**

New!

612SO534

PACE worldwide

XR 3500 X-Ray Inspection System

RoHS Compliant

Ideal for inspecting BGAs, CSPs and other components for solder bridging, cold solder joints, missing solder balls and solder voids. Use as stand-alone inspection system with a composite video compatible monitor (not included), or with TF or IR series Area Array Rework Systems to compare real-time images to a user-built library for easy identification of process defects. Electronically stores images. **Specs:** Color camera: High resolution with 7-40x zoom; Max PCB size: 30" x unlimited (760mm x unlimited); Focal spot: 0.008" (0.2mm); Focal spot to image plane distance: 4.875" (124mm); Adjustments: Live or capture video signal. Frame average up 32,000 frames and video gain adjustment.

w/2" detector plate
No. 612SO539 .....**$32,000.00**

w/1" detector plate
No. 612SO540 .....**$34,000.00**

New!

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.

We reserve the right to correct misprints.

PACE worldwide

PRC2000 Benchtop Thru-Hole System

Best Seller

PRC2000 System

PRC 2000 is a Process Control System for universal assembly and repair of electronic assemblies. The system includes the power source with a selection of accessories and functional aids. It's an advanced, self-contained rework and repair system created for the service bench or production workstation.

LEASING AVAILABLE!

Features:

- Universal SMT component installation and removal
- Self-contained solder paste and flux dispensing – no shop air needed
- Lightweight, variable-speed Micro-Chime handpiece for repairing precision circuitry substrates
- Built-in vacuum and Pic-Vac component handling wand

The PRC 2000´s Thermal Management Center powers and controls three SensaTemp handpieces simultaneously for safe, rapid installation and removal of virtually all surface mount and thru-hole components. Fully self-contained with three separate pumps for Sodr-X-Tractor, ThermoJet, and ThermoPik operation, liquid dispensing and Pik-Vac component handling. Continuous automatic calibration, auto/manual temperature setback, auto power down, and constant memory. Built-in password security function. Auto tips offset compensation system. Three auxiliary SensaTemp controlled channels (rear panel) for future AC line powered accessories.

The ***Pik and Paste*** section features a self-contained high pressure air supply with timing control for precise dispensing of solder paste and other materials. The vacuum pick has a finger actuated release for convenient component handling.

The ***MicroChine*** is a lightweight, variable speed machining handpiece for precise circuitry and substrate repair. With its tachometer, it can maintain controlled drilling and milling rates under varying loads. Probe brake feature instantly stops machining at a selected layer depth for safe multi-layer repair.

The ***Pulse Heat*** section provides variable controlled, low voltage AC pulse power to an array of specialized handpieces for safe surface mount rework, circuitry repair, auxiliary heating, coating removal and thermal wire stripping. The Pulse Plate section offers variable controlled DC pulse current for high-quality electroplating of edge connectors and other circuit contacts with gold, nickel and other metals. (Electro Plating Kit optional.)

Includes: (A) TW-15 Resis Tweez Handpiece, (B) MC-65 MicroChine, (C) PV-65 Pik-Vac Wand, (D) SX-90 Sodr-X-Tractor, (E) TJ-70 ThermoJet, (F) TP-65 ThermoPik, (G) PS-90 Handpiece, (H) TT-65 Thermo Tweez, (I) LF-15 LapFlo Hot Bar Handpiece.

PRC 2000 115VAC, 60Hz, 400 Watts. **(USA)**
No. 612PA0132 (P/N 8007-0132).....**$4,535.90**

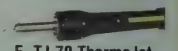
HANDPIECES

A. TW-15 ResisTweeze

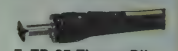
B. MC-65 MicroChine

C. PV-65 Pik Vac Wand

D. SX-90 Sodr-X-Tractor



E. TJ-70 ThermoJet



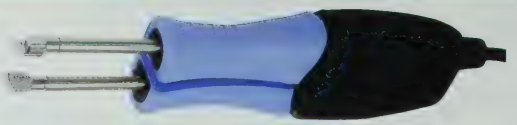
F. TP-65 ThermoPik

G. PS-90 Soldering Iron

H. TT-65 ThermoTweez

I. LF-15 LapFlo Handpiece

MT-100 MiniTweez



Ergonomic soft-comfort grip. Removes a wide variety of SMD's quickly and easily even on compact high thermal mass PCBs. (Tips sold separately)

IntelliHeat™ MT-100 MiniTweez with Tool Stand
No. 612SO264 .....**$160.50**

HeatWise®/TempWise® MT-100 MiniTweez with Tool Stand
No. 612SO243 .....**$165.30**

Pace Tips for the MT-100 MiniTweez™

Tips for MiniTweez™ (2/pk.)			
TT No.	Component Type	Description	PRICE/Pk.
612SO1001	Chip	.2mm Wide	$55.00
612SO1002	Chip, SOTs	.5mm Wide	$55.00
612SO1003		1mm Wide	$55.00
612SO1004		2mm Wide	$55.00
612SO1005	SOICs, SOT, TSOPs, Narrow Body Connectors	6mm Wide	$55.00
612SO1006		8mm Wide	$55.00
612SO1007		10mm Wide	$55.00
612SO1008		12mm Wide	$55.00

PS-90 Soldering Iron

Universal soldering iron ideal for most soldering and SMT rework applications. Provides high thermal capacity and flexibility. (Tips sold separately)

IntelliHeat™ PS-90 Soldering Iron with Tool Stand
No. 612SO267 .....**$99.10**

IntelliHeat™ PS-90 Handpiece Only
No. 612SO015 .....**$95.00**

SensaTemp® PS-90 Soldering Iron with Tool Stand
No. 612PA199.....**$99.10**

SensaTemp® PS-90 Handpiece Only
No. 612SO0131 .....**$95.00**

PS-90 Replacement Parts

TT No.	Model No.	Description	PRICE
612PA509	6010-0095-P1	PS-90 Heater Assembly	$68.00
612PT110	4021-0008-P3	Sponge for PS-90 Tool Stand	$12.80

PS-90 Long Life Tips

Tip	TT No.	Description	PRICE
	612PA606	1/16" Chisel High Capacity, 5/pk	$38.90
	612PA639	1/32" Conical, 5/pk	$43.20
	612PA640	1/16" Chisel Long Reach, 5/pk	$43.20
	612PA608	Mini-Wave, 5/pk	$49.90
	612PA648	Angled Mini-Wave, 5/pk	$49.90
	612PA652	Flat Blade, 1/4"	$17.40

PS-90 Tips

Tip	TT No.	Description	PRICE/5 Pk.
	612TI0357	1/64" Conical, .016"W	$31.00
	612TI0336	1/32" Conical, .031"W	$31.00
	612TI0359	1/32" Chisel; .031"W	$31.00
	612TI361	1/32" Bent Chisel; .031"W	$31.00
	612TI0349	1/16" Microfine Chisel; .063"W	$31.00
	612TI0335	1/16" Chisel; .063"W	$31.00
	612TI414	1/16" High Cap. Chisel; .063"W	$31.00
	612TI533	1/16" Extended Reach Chisel; .063"W	$31.00
	612TI499	1/16" Chisel Long Reach .063"W	$31.00
	612TI500	1/16" Bent Chisel Long Reach; .063"W	$38.90
	612TI360	3/32" Chisel; .094"W	$31.00
	612TI0337	1/8" Chisel; .125"W	$31.00
	612TI358	3/16" Chisel; .188"W	$31.00
	612TI0563	1/16" Single Sided Chisel, Fine Pitch	$38.90
	612TI0564	Mini-Wave®, Fine Pitch; 0.07"W	$38.90
	612TI0610	Angled Mini Wave 0.09"W	$38.90
	612TI0406	Single-Sided Chisel; 0.13"W	$31.00
	612TI490	Mini-Wave® 0.13"W	$38.90
	612TI510	1/16" Chisel, Thermo-Drive	$38.90
	612TI518	1/8" Chisel, Thermo-Drive	$38.90

PS-90 SMT Removal Tips

SMT Tip	TT No.	Suggested Application	Tip Size A x B Outside Dimensions	PRICE
A B	612TI390	SOIC-8 (JEDEC)	.199"(5.05mm) x .200"(5.08mm)	$36.90
	612TI0391	SOIC-14(JEDEC)	.199"(5.05mm) x .354"(8.99mm)	$38.40
	612TI0392	SOIC-16 (JEDEC)	.199"(5.05mm) x .404"(10.2mm)	$38.40
	612TI0302	Chip Component	.093"(2.36mm) x .080"(2.03mm)	$18.20
	612TI303	Chip Component	.14"(3.56mm) x .08"(2.03mm)	$18.20

SX-90 Sodr-X-Tractor

Solder extraction handpiece for high volume operations. *(Tips sold separately.)*

IntelliHeat™ SX-90 with Tool Stand
No. 612SO266.....$292.30

IntelliHeat™ SX-90 Handpiece Only
No. 612SO149.....$269.40

SensaTemp® SX-90 Handpiece with Tool Stand
No. 612PA213 .....$307.00

SensaTemp® SX-90 Handpiece Only
No. 612PA106 .....$276.30

SX-90 Replacement Parts

TT No.	Model No.	Description	PRICE
612PA139	1309-0054-P10	SX-90 Flux/Sodr trap - 10/pk	$12.50
612PA0054	1309-0054-P100	SX-90 Flux/Sodr trap - 100/pk	$110.00
612PA107	6010-0107-P1	SX-90 Heater Assembly	$110.00
612PA087	1213-0087-P1	SX-90 Front Seal	$5.10
612PA122	1213-0086-P1	SX-90 Rear Seal	$6.70

Replacement Parts For SX Models

TT No.	Model No.	Description	PRICE
612PT020	1309-0020	VisiFilter, Fixed	$10.30
612PT028	1309-0028	VisiFilter, Replacement	$14.10
612PT027	1309-0027-P10	Replaceable VisiFilter Elements, 10/pk	$11.50
612PT725	1309-0027-P25	Replaceable VisiFilter Elements, 25/pk	$24.30
612PT750	1309-0027-P50	Replaceable VisiFilter Elements, 50/pk	$39.60
612PT002	1127-0002-P5	Bristle Brush, 5/pk	$19.20
612PT014	1127-0014-P5	Wire Brush (3/16") 5/pk	$21.30
612SO0006	1127-0006-P5	Wire Brush (1/8") 5/pk	$23.70

SX-90 Desoldering Tips

New!

For use with SX-90 only.

Tip	TT No.	Pace No.	I.D. x O.D.	PRICE 5/Pk
Thermo-Drive	612SO930	1121-0930-P5	0.030"(0.76mm) x 0.080"(2.03mm)	$48.10
	612SO931	1121-0931-P5	0.040"(1.02mm) x 0.090"(2.29mm)	$48.10
	612SO932	1121-0932-P5	0.060"(1.52mm) x 0.120"(3.05mm)	$48.10
	612SO933	1121-0933-P5	0.090"(2.29mm) x 0.200"(5.1mm)	$48.10
	612SO951	1121-0951-P5	0.16"(4mm) x 0.200"(5.1mm)	$48.10
Thermo-Drive, Flathead	612SO934	1121-0934-P5	(0.050") x (0.090") x (0.110") x (0.190")	$48.10
Extended Reach, Thermo-Drive	612SO935	1121-0935-P5	0.030"(0.78mm) x 0.090"(2.29mm)	$48.10
	612SO936	1121-0936-P5	0.040"(1.02mm) x 0.10"(2.54mm)	$48.10
	612SO937	1121-0937-P5	0.060"(1.52mm) x 0.120"(3.05mm)	$48.10
ThermoMax	612SO938	1121-0938-P5	0.030"(0.76mm) x 0.075"(1.91mm)	$56.80
	612SO939	1121-0939-P5	0.040"(1.02mm) x 0.085"(2.20mm)	$56.80
	612SO940	1121-0940-P5	0.060"(1.52mm) x 0.106"(2.69mm)	$56.80
Precision	612SO941	1121-0941-P5	0.020"(0.50mm) x 0.070"(1.79mm)	$27.30
	612SO942	1121-0942-P5	0.030"(0.76mm) x 0.080"(2.03mm)	$27.30
	612SO943	1121-0943-P5	0.040"(1.02mm) x 0.090"(2.29mm)	$27.30
	612SO944	1121-0944-P5	0.060"(1.52mm) x 0.110"(2.79mm)	$27.30
	612SO949	1121-0949-P5	0.025"(0.635mm) x 0.055"(1.39mm)	$27.30
	612SO950	1121-0950-P5	0.025"(0.635mm) x 0.045"(1.14mm)	$27.30
Flo-D-Sodr	612SO945	1121-0945-P5	0.060"(1.52mm) x 0.188"(4.78mm)	$48.10
Flo-D-Sodr, Precision	612SO946	1121-0946-P5	0.020"(0.50mm) x 0.070"(1.78mm)	$35.00
	612SO947	1121-0947-P5	0.030"(0.76mm) x 0.080"(2.03mm)	$35.00
	612SO948	1121-0948-P5	0.040"(1.02mm) x 0.090"(2.29mm)	$35.00

SX-70 Sodr-X-Tractor

General purpose extraction handpiece. Includes tool stand. *(Desoldering tips sold separately.)*
No. 612SO227 .....$307.00

For More Tips See Page 28!

SX-70 Desoldering Tips

Tip	TT No.	Description O.D. x I.D.	PK	PRICE
Thermo-Drive	612TI367	.060"(1.52mm) x .030"(0.76mm)	5/Pk	$35.70
	612TI342	.070"(1.78mm) x .040"(1.02mm)	5/Pk	$35.70
	612TI368	.100"(2.54mm) x .060"(1.52mm)	5/Pk	$35.70
Extended Reach	612TI494	.085"(2.16mm) x .040"(1.02mm)	5/Pk	$34.80
	612TI506	.106"(2.69mm) x .060"(1.52mm)	5/Pk	$35.70
Long Life Tips	612TI463	.085"(2.16mm) x .040"(1.02mm)	5/Pk	$71.30
	612TI0464	.106"(2.69mm) x .060"(1.52mm)	5/Pk	$71.30
Thermo-Drive	612TI369	.188"(4.77mm) x.060"(1.52mm)	5/Pk	$35.70

SX-70 and SX-80 Desoldering Tips

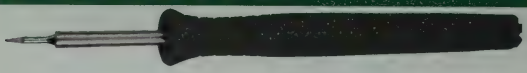
Tip	TT No.	Description I.D. x O.D.	PK	PRICE
Thermo-Drive	612TI625	.030" x .080"	5/Pk	$47.60
	612TI624	.040" x .090"	5/Pk	$47.60
	612TI626	.060" x .120"	5/Pk	$47.60
	612TI627	.090" x .200"	5/Pk	$47.60
Thermo-Drive, Flathead	612PA133	0.060" x 0.104" x .100" x .175"	5/Pk	$47.60
Extended Reach Thermo-Drive	612TI628	.030" x .090"	5/Pk	$47.60
	612TI629	.040" x .100"	5/Pk	$47.60
	612PA630	.060" x .120"	5/Pk	$47.60
Precision	612TI680	.020" x .070"	5/Pk	$24.40
	612TI678	.030" x .080"	5/Pk	$24.40
	612TI679	.040" x .090"	5/Pk	$24.40
	612TI690	.060" x .110"	5/Pk	$24.40
Flo-D-Sodr	612TI631	.060" x .188"	5/Pk	$47.60
Flo-D-Sodr, Precision	612TI681	.020" x .070"	5/Pk	$33.90
	612TI682	.030" x .080"	5/Pk	$33.90
	612TI683	.040" x .090"	5/Pk	$33.90

Pace Handpieces & Tips

SX-70, SX-65A and SX-55A Spare Parts

TT No.	Pace No.	Description	PRICE
612PT009	1265-0009-P1	Glass Chamber	$11.20
612PT010	1265-0010-P1	Optional Silicon Rubber Chamber	$12.10
612MI033	4010-0033	"S" Baffle	$2.70
612IR080	6010-0080-P1	SX-70 Heater and Seal Assembly	$100.30
612PA098	4010-0098-P1	SX-70 Switch and Cord Assembly Kit	$73.60
612PT033	1213-0033	Front Seal, Heater (SX-70, SX-65A, SX-55A)	$6.70
612PT213	1213-0001	Rear Seal (SX-70, SX-65A, SX-55A)	$6.70

TD-100 Thermo-Drive Iron



Heater and sensor are built right into the tip for maximum performance. Temperature recovery is instantaneous because the tip, sensor and heater are one. (Tips sold separately)

IntelliHeat™ TD-100 Thermo-Drive with Tool Stand
No. 612SO263 .....$88.00

HeatWise®/TempWise® TD-100 Thermo-Drive with Tool Stand
No. 612SO242 .....$100.40

TD-100 Thermo-Drive Iron Tips

Tip	TT No.	Model No.	Shape	Tip	PRICE
	612SO0001	1124-0001-P1	Conical Sharp Ext.	.031"	$9.50
	612SO2002	1124-0002-P1	Conical Sharp	.016"	$9.50
	612SO3003	1124-0003-P1	30° Conical Sharp	.016"	$9.50
	612SO4004	1124-0004-P1	Conical Sharp Ext.	.016"	$9.50
	612SO1015	1124-0015-P1	Conical Sharp Bent 30° Ext.	.016"	$9.50
	612SO1018	1124-0018-P1	Conical Sharp Ext.	.031"	$9.50
	612SO1021	1124-0021-P1	Conical Sharp Bent 30°	.023"	$9.50
	612SO1025	1124-0025-P1	Conical Sharp Ext.	.063"	$9.50
	612SO1027	1124-0027-P1	Conical Sharp	.023"	$9.50
	612SO030	1124-0030-P1	Conical Sharp	.031"	$9.50
	612SO1011	1124-0011-P1	60° Bevel	.016"	$9.50
	612SO1024	1124-0024-P1	30° Bevel	.063"	$9.50
	612SO7007	1124-0007-P1	90° Chisel	.063"	$9.50
	612SO8008	1124-0008-P1	30 Chisel	.047"	$9.50
	612SO1010	1124-0010-P1	Chisel	.203"	$9.50
	612SO1012	1124-0012-P1	30° Chisel	.031"	$9.50
	612SO1013	1124-0013-P1	30° Chisel	.094"	$9.50
	612SO1016	1124-0016-P1	Chisel Bent 30°	.047"	$9.50
	612SO1017	1124-0017-P1	60° Chisel	.063"	$9.50
	612SO0001	1124-0001-P1	Conical Sharp Ext.	.031"	$9.50
	612SO1019	1124-0019-P1	30° Chisel	.063"	$9.50
	612SO1020	1124-0020-P1	90° Chisel	.125"	$9.50
	612SO1023	1124-0023-P1	90° Chisel Ext.	.125'	$9.50
	612SO1026	1124-0026-P1	Chisel Bent 30°	.063"	$9.50
	612SO1028	1124-0028-P1	Chisel Bent 30° Ext	.047'	$9.50
	612SO0034	1124-0034-P1	Single-Sided Chisel	.250"	$9.50
	612SO032	1124-0032-P1	MiniWave	.250"	$9.50
	612SO033	1124-0033-P1	Angled MiniWave	.250'	$9.50
	612SO035	1124-0035-P1	Angled MiniWave	.120"	$9.50
	612SO037	1124-0037-P1	Flat Blade	.250"	$14.00

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.

We reserve the right to correct misprints.

TJ-85 ThermoJet

Slim line, pencil-grip design and focused nozzle tips lets you easily control heat without damaging board. Includes tool stand.

Shop our Web Store www.techni-tool.com for complete tip selection!

IntelliHeat™ TJ-85 Handpiece with Tool Stand
No. 612SO270.....$175.00

SensaTemp® TJ-85 Handpiece with Tool Stand
No. 612SO0247.....$175.00

TJ-70 ThermoJet

For safe, rapid installation of components, SOTs, SOICs, PLCCs, and QFPs.
No. 612IR023 .....$319.30

TJ-70 Heater Assembly
No. 612IR084 .....$140.40

TJ-70 Handle Kit
No. 612MI140.....$44.70

TJ-70 Nozzles

Nozzle	TT No.	Description	Nozzle Size	PRICE/Ea.
	612TI366	Small Single Jet	0.060" I.D.	$48.00
	612TI0338	Small Curved Single Jet	0.060" I.D.	$56.80
A	612TI0330	SOIC Dual Jet	A= 0.17"(4.32mm)	$91.60
A B	612TI0365	Flat End	A=.28"(7.11mm) x B=.074"(1.88mm)	$56.80
	612TI371	Flat End	A=.24"(6.10mm) x B=.074"(1.88mm)	$52.20

TT-65 ThermoTweez

Provides safe, efficient reflow and removal of PLCCs and other four-sided or two-sided SMT components.

IntelliHeat™ TT-65 ThermoTweez with Tool Stand
No. 612SO268 .....$332.40

SensaTemp® TT-65 ThermoTweez with Tool Stand
No. 612SO0207 .....$337.70

IntelliHeat™ TT-65 ThermoTweez Only
No. 612SO151 .....$309.50

SensaTemp® TT-65 ThermoTweez Only
No. 612IR0001.....$319.30

TT-65 ThermoTweez Handpiece Tips

Tip	TT No.	Suggested Application	Tip Size A x B Outside Dimensions	PRICE Pair
	612TI398	Chip Component	0.03" (0.76mm)	$66.10
	612TI0313	Chip Component	0.08" (2.0mm)	$65.80
	612TI399	Chip Component	0.16" (4.1mm)	$66.10
	612TI0401	Chip Component	0.25" (6.4mm)	$66.10
A	612TI520	Thin Walled Chip Component (vertical) Small SOIC	A= 0.03" (0.76mm)	$71.30
	612TI521		A= 0.08" (2.0mm)	$71.30
	612TI0517	1/64" Angled Fine Point Conical	A= 0.017" (0.13mm)	$27.10
SOIC, SOJ Components	612TI512	Narrow Body/SOIC	0.3" (7.6mm)	$72.60
	612TI514	Narrow Body/SOIC	0.4" (10.2mm)	$72.60
	612TI473	SOIC/SOJ	0.5" (12.7mm)	$72.60
	612TI416	SOIC/SOJ	0.7" (17.8mm)	$71.90
	612TI497	SOIC/SOJ	0.8" (20.3mm)	$72.60
	612TI448	SOIC/SOJ	1.00" (25.4mm)	$71.90
A B Application PLCC	612TI0316	PLCC-20	.27" (6.86mm) x .27" (6.86mm)	$65.80
	612TI0317	PLCC-28	.37" (9.4mm) x .37" (9.4mm)	$65.80
	612TI0352	PLCC-32	.48" (12.2mm) x .38" (9.65mm)	$64.30
	612TI318	PLCC-44, PQFP-84	.57" (14.5mm) X .57" (14.5mm)	$65.80
	612TI0319	PLCC-52, PQFP-100	.67" (17.0mm) X .67" (17.0mm)	$71.30
	612TI0320	PLCC-68,PQFP-132	.86" (21.9mm) X .86" (21.9mm)	$71.30
	612TI321	PLCC-84, PQFP-160	1.06" (26.9 mm) X 1.06" (26.9mm)	$71.30

Power. Precision. Performance.

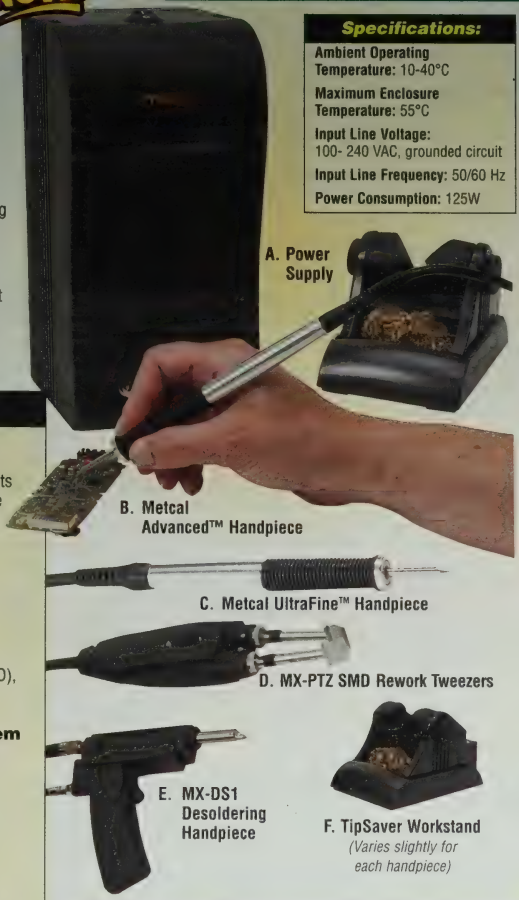
METCAL MX-5000

Soldering and Rework Systems

- **More power.** With near double the power of previous models, the MX-5000 temperature recovery time increases production rates and throughput.
- **Increased precision.** The new Metcal Advanced™ and Metcal UltraFine™ handpieces are designed to decrease operator fatigue and enhance manual dexterity. Choose from three interchangeable grips to meet preferences for comfort and feel.
- **Greater performance.** SmartHeat® technology in every MX-5000 means soldering and rework is always done at safe, controlled temperatures. SmartHeat uses moderate fixed temperatures at varied power to provide the best control.

The power supply monitors and varies the power according to the load. The built-in power indicator meter features both a digital and bar graph display to provide instant feedback on your operation. The programmable power save mode saves energy and tip life. The new TipSaver™ workstands include an auto sleep mode that prolongs tip life by cutting power 90% and an adjustable angle cradle for improved ergonomics. ***Tips sold separately.***

New!



Specifications:

Ambient Operating Temperature: 10-40°C
Maximum Enclosure Temperature: 55°C
Input Line Voltage: 100- 240 VAC, grounded circuit
Input Line Frequency: 50/60 Hz
Power Consumption: 125W

Choose the system that best fits your needs

MX-5010 Soldering/Rework System
Includes: Power supply (A), Metcal Advanced™ handpiece (B), MX-W1AV TipSaver workstand (F). Use with STTC cartridges for soldering lead-free, high mass components or boards, thermally sensitive components that require low temperatures, high volume soldering and rework operations. Use with SMTC cartridges for conduction rework.
No. 551S05010 ..... $650.00

MX-5020 Soldering/Rework System
Includes: Power supply (A), Metcal UltraFine™ handpiece (C), MX-W1AV TipSaver workstand (F). Use with UFTC cartridges for soldering and touch-up of very small components, restricted access or high density component packaging on a PCB.
No. 551S05020 ..... $675.00

MX-5041 Precision Tweezers, Soldering/Rework System
Includes: Power supply (A), Metcal Advanced™ handpiece (B), MX-PTZ tweezers (D), MX-W4PT and MX-W1AV workstands (F) for maximum flexibility.
No. 551S05041 ..... $1,010.00

MX-5050 Plated Through-Hole Component Desoldering System
Includes: Power supply (A), MX-DS1 desoldering handpiece (E) and MX-W5DS TipSaver workstand (F). Use with high mass STDC cartridges for very large ground plane or lead-free solder applications.
No. 551S05050 ..... $865.00

MX-5051 Soldering, Desoldering and Rework System
Combines both the desoldering handpiece and the Advanced™ handpiece, creating a system that can solder, desolder and rework surface mount components.
Includes: Power supply (A), Metcal Advanced™ handpiece (B), MX-DS1 desoldering handpiece (E), Metcal TipSaver workstands (F).
No. 551S05051 ..... $1,050.00

Upgrade Kits

MX-UK1 – Metcal Advanced™ handpiece (B) and MX-W1AV TipSaver workstand (F)
No. 551S05291 ..... $185.00

MX-UK2 – Metcal UltraFine™ handpiece (C) and MX-W1AV TipSaver workstand (F)
No. 551S05295 ..... $210.00

MX-UK4 – MX-PTZ precision tweezer (D) and MX-W4PT TipSaver workstand (F)
No. 551S05292 ..... $360.00

MX-UK5 – MX-DS1 desoldering handpiece (E) and MX-W5DS TipSaver workstand (F)
No. 551S05293 ..... $400.00

Interchangeable Handpiece Grips

	Pattern	Metcal Advanced™ Handpiece Grip		Metcal UltraFine™ Handpiece Grip	
		Model	TT No.	Model	TT No.
	Ring	MX-H1GR	551S05080	MX-H2GR	551S05085
	Knob	MX-H1GK	551S05081	MX-H2GK	551S05086
	Scallop	MX-H1GS	551S05082	MX-H2GS	551S05087
	PRICE	$25.00		$30.00	

METCAL

UFTC UltraFine™ Tip Cartridges

New!

Tip	TT No.	Model	Series	Shape	Size	PRICE
	551S09801	UFTC-7CN01	700	Conical	0.005" X 0.2" (0.13mm X 5.1mm)	$29.00
	551S09802	UFTC-7CN02	700	Conical	0.01" X 0.2" (0.2mm X 5mm)	$29.00
	551S09803	UFTC-7CN04	700	Conical	0.02" X 0.2" (0.4mm X 5mm)	$29.00
	551S09804	UFTC-7CNL04	700	Long Conical	0.02" X 0.31" (0.4mm X 9mm)	$29.00
	551S09805	UFTC-7CNB02	700	Bent Conical	0.01" X 0.22" (0.2mm X 5.5mm)	$29.00
	551S09806	UFTC-7CNB04	700	Bent Conical	0.02" X 0.22" (0.4mm X 5.5mm)	$29.00

Tip	TT No.	Model	Series	Shape	Size	PRICE
	551S09807	UFTC-7CH06	700	Chisel	0.024" X 0.2" (0.6mm X 5.1mm)	$29.00
	551S09808	UFTC-7CH08	700	Chisel	0.03" X 0.2" (0.8mm X 5.1mm)	$29.00
	551S09809	UFTC-7CH12	700	Chisel	0.05" X 0.2" (1.2mm X 5mm)	$29.00
	551S09810	UFTC-7CHL06	700	Long Chisel	0.024" X 0.35" (0.6mm X 9mm)	$29.00
	551S09811	UFTC-7CHL08	700	Long Chisel	0.03" X 0.35" (0.8mm X 9mm)	$29.00
	551S09812	UFTC-7DRH408	700	Micro Hoof	0.03" X 0.2" (0.8mm X 5.1mm)	$29.00
	551S09813	UFTC-7DRH412	700	Micro Hoof	0.048" X 0.2" (1.2mm X 5.1mm)	$29.00

METCAL

Economical Soldering System
Cuts Costs, Not Corners!

SP200 Soldering System

Best Seller

Features SMARTHEAT® TECHNOLOGY!

Designed as the perfect complement to an MX-500 system, this low-cost, easy-to-use station handles thru-hole soldering and SMT touch-ups. For flawless soldering, simply select the correct tip cartridge, insert it into the handpiece and switch the unit on – ***METCAL*** SmartHeat® applies the correct level of thermal energy.

No. 551SO032 ..... $329.00

RoHS Compliant

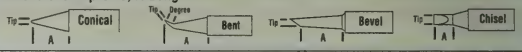
SP200 Replacement Parts

No. 551AC818	(SP-HC1)	Handpiece and cord	$60.00
No. 551PR828	(SP-WSK1)	Workstand w/sponge	$43.30
No. 551SO024	(AC-CP2)	Cartridge removal pad	$6.18
No. 551AC026	(AC-YS3)	Sponge 50/Pk	$38.63
No. 551PR554	(AC-TSTAND)	Tip stand	$40.00
No. 551AC285	(AC-TCASE)	STTC/SSC Tip case	$70.00
No. 551AC0100		Soft tip cleaning brush (6)	$49.44

SP200 SSC Tip Cartridges

Tip	TT No.	Temp Series	Model No.	Shape	Dims. Inches Tip	A	PRICE
	551TI316	600	SSC-613A	90° Chisel	.13"	.30"	$17.50
	551TI147	700	SSC-713A				$17.50
	551TI136	600	SSC-636A	30° Chisel	.10"	.39"	$15.50
	551TI156	700	SSC-736A				$15.50
	551TI138	600	SSC-637A	30° Chisel	.07"	.40"	$15.50
	551TI158	700	SSC-737A				$15.50
	551TI140	600	SSC-638A	30° Chisel	.06"	.40"	$15.50
	551TI160	700	SSC-738A				$15.50
	551TI256	600	SSC-625A	30° Chisel	.04"	.43"	$15.50
	551TI152	700	SSC-725A				$15.50
	551TI601	600	SSC-601A	Conical Sharp	.04"	.60"	$15.50
	551TI701	700	SSC-701A				$15.50
	551TI142	600	SSC-642A	60° Chisel	.07"	.63"	$17.50
	551TI742	700	SSC-742A				$17.50

Dimensions: Tip-Size; A-Length

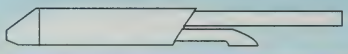


Tip	TT No.	Temp Series	Model No.	Shape	Dims. Inches Tip	A	PRICE
	551TI130	600	SSC-622A	Conical Sharp	.02"	.45"	$15.50
	551TI150	700	SSC-722A				$15.50
	551TI134	600	SSC-626A	Sharp Bent 30°	.02"	.45"	$15.50
	551TI154	700	SSC-726A				$15.50
	551TI144	600	SSC-645A	Conical Sharp	.016"	.75"	$15.50
	551TI162	700	SSC-745A				$15.50
	551TI396	600	SSC-639A	Multi-Lead	.016"	.70"	$25.28
	551TI739	700	SSC-739A	Speed Solder			$25.28

METCAL MX System Tip Cartridges

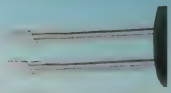
STDC - Tip Cartridges for MX Desoldering Systems

TT No.	Series	Inside Dia.	Outside Dia.	Long Reach	PRICE
551TI200	600	0.025"	0.055"	No	$37.65
551TI076	700	0.025"	0.055"	No	$37.65
551TI802	800	0.025"	0.055"	No	$55.65
551TI201	600	0.030"	0.066"	No	$37.65
551TI078	700	0.030"	0.066"	No	$37.65
551TI084	800	0.030"	0.066"	No	$55.65
551TI307	700	0.030"	0.066"	Yes	$41.75
551TI803	800	0.030"	0.066"	Yes	$61.00
551TI202	600	0.040"	0.070"	No	$37.65
551TI080	700	0.040"	0.070"	No	$37.65
551TI086	800	0.040"	0.070"	No	$55.65
551TI774	700	0.040"	0.070"	Yes	$41.75
551TI804	800	0.040"	0.070"	Yes	$61.00



TT No.	Series	Inside Dia.	Outside Dia.	Long Reach	PRICE
551TI203	600	0.050"	0.080"	No	$37.65
551TI082	700	0.050"	0.080"	No	$37.65
551TI087	800	0.050"	0.080"	No	$55.65
551TI507	700	0.060"	0.080"	Yes	$41.75
551TI805	800	0.060"	0.080"	Yes	$61.00
551TI204	600	0.060"	0.090"	No	$37.65
551TI061	700	0.060"	0.090"	No	$37.65
551TI806	800	0.060"	0.090"	No	$55.65
551TI071	700	0.095"	0.125"	No	$37.65

TATC Tip Cartridges for MX Talon Systems



TT No.	Description	Series	Tip Size Inch	PRICE
551TI034	Fine Point	500	0.03" to	$103.00
551TI036		600	0.37"	$103.00
551TI502	Blades 0.25"	500	0.00" to	$103.00
551TI0036		600	0.36"	$103.00
551TI503	Blades 0.62"	500	0.06" to	$103.00
551TI040		600	0.42"	$103.00
551TI504	Blades 0.81"	500	0.10" to	$103.00
551TI038		600	0.47"	$103.00
551TI005	TSOP 32	600	0.0 to 0.78"	$103.00
551TI0606	Blades 1.10"	600	0.0 to 0.66"	$123.60

SMTC - Tunnel Cartridges for MX Systems

Available Temperature Range Tips: • 600 Series 675°F • 700 Series 775°F

SMD Component	TT No.	Model	Series	W x W x L x D	PRICE
SOIC-8	551TI004	SMTC-004	600	.200 .200 .170 .90	$41.75
	551TI0104	SMTC-104	700	.200 .200 .170 .90	$41.75
SOIC-14,-16	551TI048	SMTC-006	600	.200 .200 .400 .090	$41.75
	551TI0016	SMTC-106	700	.200 .200 .400 .090	$41.75
SOIC-20	551TI050	SMTC-010	600	.375 .375 .520 .125	$41.75
	551TI1010	SMTC-110	700	.375 .375 .520 .125	$41.75
PLCC-44	551TI1118	SMTC-1118	700	.660 .660 .100	$65.50
PLCC-52	551TI168	SMTC-114	700	.750 .750 .150	$65.50

SMD Component	TT No.	Series	W x W x L x L x D	PRICE
PLCC-32	551TI016	600	.450 .500 .550 .600 .100	$65.50
	551TI0116	700	.450 .500 .550 .600 .100	$65.50
PLCC-28	551TI0013	600	.455 .500 .455 .500 .100	$65.50
	551TI0113	700	.455 .500 .455 .500 .100	$65.50
QFP-128 (3.2mmfp)	551TI1133	700	.620 .620 .860 .860 .130	$97.00
QFP-100	551TI064	700	.650 .650 .885 .885 .130	$97.00
QFP-144	551TI1122	700	.805 .840 .805 .840 .075	$97.00
QFP-208 Dual	551TI081	600	1.125 1.170 1.125 1.170 .114	$139.00
	551TI181	700	1.125 1.170 1.125 1.170 .114	$139.00

Quantity Discounts Available

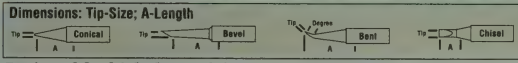
STTC tip Cartridges for MX Systems

Available Tip Temperature Ranges :

• 500 Series ≤ 575°F • 600 Series ≤ 675°F • 700 Series ≤ 775°F

Tip	TT No.	Series	Model No.	Shape	Dims. mm (Inch) Tip	Dims. mm (Inch) A	PRICE
	551TI525	500	STTC-525	30° Chisel	1.0 (.04)	9.1 (.36)	$22.60
	551TI090	600	STTC-025				$22.60
	551TI110	700	STTC-125				$22.60
	551TI537	500	STTC-537	30° Chisel	1.78 (.07)	9.9 (.39)	$22.60
	551TI094	600	STTC-037				$22.60
	551TI116	700	STTC-137				$22.60
	551TI538	500	STTC-538	30° Chisel	1.5 (.06)	9.9 (.39)	$22.60
	551TI096	600	STTC-038				$22.60
	551TI118	700	STTC-138				$22.60
	551TI536	500	STTC-536	30° Chisel	2.5 (.10)	9.9 (.39)	$22.60
	551TI092	600	STTC-036				$22.60
	551TI114	700	STTC-136				$22.60
	551TI452	500	STTC-542	60° Chisel	1.78 (.07)	16.0 (.63)	$22.60
	551TI0042	600	STTC-042				$22.60
	551TI122	700	STTC-142				$22.60
	551TI513	500	STTC-513	90° Chisel	3.0 (.12)	4.8 (.19)	$22.60
	551TI613	600	STTC-013				$22.60
	551TI113	700	STTC-113				$22.60
	551TI565	500	STTC-565	Large Chisel	5.0 (.20)	11.4 (.45)	$25.70
	551TI065	600	STTC-065				$25.70
	551TI165	700	STTC-165				$25.70
	551TI517	500	STTC-517	Extra Large Chisel	5.0 (.20)	7.6 (.30)	$22.60
	551TI617	600	STTC-017				$22.60
	551TI106	700	STTC-117				$22.60
	551TI598	500	STTC-598	30° Chisel Bent	1.78 (.07)	9.9 (.39)	$22.60
	551TI0098	600	STTC-098				$22.60
	551TI135	700	STTC-198				$22.60
	551TI540	500	STTC-540	30° Sharp Bent	0.4 (.016)	16.0 (.63)	$22.60
	551TI098	600	STTC-040				$22.60
	551TI120	700	STTC-140				$22.60
	551TI599	500	STTC-599	30° Chisel Bent	1.5 (.06)	11.9 (.47)	$22.60
	551TI099	600	STTC-099				$22.60
	551TI199	700	STTC-199				$22.60
	551TI541	500	STTC-541	Chisel 30°	1.3 (.05)	21.8 (.86)	$22.60
	551TI100	600	STTC-041				$22.60
	551TI141	700	STTC-141				$22.60
	551TI650	500	STTC-506	Conical Sharp	0.4 (.016)	13.7 (.54)	$22.60
	551TI006	600	STTC-006				$22.60
	551TI0106	700	STTC-106				$22.60
	551TI075	500	STTC-507	Conical Sharp	1.0 (.04)	16.7 (.66)	$22.60
	551TI007	600	STTC-007				$22.60
	551TI017	700	STTC-107				$22.60
	551TI522	500	STTC-522	Conical Sharp	0.4 (.016)	8.4 (.33)	$22.60
	551TI088	600	STTC-022				$22.60
	551TI108	700	STTC-122				$22.60
	551TI543	500	STTC-543	Conical Sharp	0.5 (.02)	15.2 (.60)	$22.60
	551TI043	600	STTC-043				$22.60
	551TI124	700	STTC-143				$22.60
	551TI535	500	STTC-535	30° Bevel	1.78 (.07)	9.9 (.39)	$22.60
	551TI035	600	STTC-035				$22.60
	551TI531	700	STTC-135				$22.60
	551TI545	500	STTC-545	60° Bevel	0.4 (.016)	14.7 (.58)	$22.60
	551TI104	600	STTC-045				$22.60
	551TI128	700	STTC-145				$22.60
	551TI547	500	STTC-547	60° Bevel	1.78 (.07)	14.2	$22.60
	551TI470	600	STTC-047				$22.60
	551TI129	700	STTC-147				$22.60
	551TI544	500	STTC-544	30° Sharp Bent	0.5 (.02)	14.5 (.56)	$22.60
	551TI102	600	STTC-044				$22.60
	551TI126	700	STTC-144				$22.60
	551TI526	500	STTC-526	30° Sharp Bent	0.4 (.016)	7.9 (.31)	$22.60
	551TI026	600	STTC-026				$22.60
	551TI112	700	STTC-126				$22.60
	551S05167	500	SMTC-5167	Mini-Hoof	1.52 (.06)	16.51 (.65)	$43.78
	551TI060	600	SMTC-0167				$43.78
	551PR5000	700	SMTC-1167				$43.78

Dimensions: Tip-Size; A-Length



Designed for high thermal demands!

STTC – Power Series Tips for MX Systems

Especially designed for the high thermal demands of lead-free alloys, these tips improve soldering performance up to 20%. Shortened tip length means heat has less distance to travel. Improved tip shaft geometry delivers heat to tip more efficiently.

Tip	TT No.	Model	Description	Dimensions	PRICE
	551S01017	STTC-101P	Conical	0.04" (1mm)	$22.60
	551S00125	STTC-125P	Chisel 30°	0.04" (1mm)	$22.60
	551S00136	STTC-136P	Chisel 30°	0.10" (2.5mm)	$22.60
	551S0137	STTC-137P	Chisel 30°	0.07" (1.78mm)	$22.60
	551S0145	STTC-145P	Conical	0.016" (0.4mm)	$22.60
	551S01470	STTC-147P	Bevel 60°	0.07" (1.78mm)	$22.60
	551S0173	STTC-1173P	Knife	0.22" (5.0mm)	$43.79

MX Precision Tweezer Cartridges

Tip	TT No.	Series	Model No.	Style	Size mm (inches)	PRICE/ PER PAIR
	551S03761	600	PTTC-601	Conical	0.4mm (.015")	$69.00
	551S03771	700	PTTC-701			$69.00
	551S03781	800	PTTC-801			$69.00
	551S03762	600	PTTC-602	Blade	1.0mm (.039")	$69.00
	551S03772	700	PTTC-702			$69.00
	551S03782	800	PTTC-802			$69.00
	551S03763	600	PTTC-603	Blade	2.0mm (.079")	$69.00
	551S03773	700	PTTC-703			$69.00
	551S03783	800	PTTC-803			$69.00
	551S03764	600	PTTC-604	Blade	6.35mm (.25")	$69.00
	551S03774	700	PTTC-704			$69.00
	551S03784	800	PTTC-804			$69.00
	551S03765	600	PTTC-605	Blade	16.0mm (.63")	$89.00
	551S03775	700	PTTC-705			$89.00
	551S03785	800	PTTC-805			$89.00
	551S03766	600	PTTC-606	Blade	20.5mm (.80")	$89.00
	551S03776	700	PTTC-706			$89.00
	551S03786	800	PTTC-806			$89.00
	551S03767	600	PTTC-607	Blade	28.0mm (1.10")	$89.00
	551S03777	700	PTTC-707			$89.00
	551S03787	800	PTTC-807			$89.00
	551S03770	700	PTTC-701B	Bent Conical	0.4mm (.015")	$69.00

MX System Tip Cartridges

SMTC - Slot Cartridges for MX Systems

SMD Components	TT No.	Series	W x L	PRICE
SOP-28	551TI139	700	.420" x .720"	$51.50
TSOP-28	551TI095	600	.505" x .320"	$51.50
TSOP-56	551TI0062	600	.760" x .526"	$92.00
Chip	551TI0096	600	.070" x	$36.50
0402, 0603	551TI196	700	.040"	$36.50
.0402, .0603	551TI588	500	.080" x	$36.50
.0805 Angle	551TI0088	600	.050"	$36.50
0805	551TI501	500	.090"	$36.50
	551TI042	600	x	$36.50
	551TI101	700	.050"	$36.50
1206, 1210	551TI0502	500	.140"	$36.50
	551TI044	600	x	$36.50
	551TI0102	700	.060"	$36.50
Case A	551TO533	500	.135" x	$36.50
SOPM-3224	551TI0035	600	.080"	$36.50
Case B	551TI532	500	.150" x	$36.50
SOPM-3528	551TI032	600	.095"	$36.50

OKi
OK INTERNATIONAL™

New!

Three position switch. Select left, right or center (both ports operational) to power hand-pieces.

A

B

C

Use two handpieces at the same time!

MFR-2200 Series Dual Output Soldering & Rework System

One station housing two separate power supplies and ports combined with three handpieces adds up to incredible flexibility for all your operations. The station drives one or two handpieces simultaneously through two power supplies, which means full power is available for each handpiece in use.

SmartHeat® technology responds to the load, delivering the energy required for each connection while protecting components and substrates from damage. Whether you're doing production soldering, touch-up or SMD rework, this system delivers the high power and versatility you need.

MFR-2210 System
Includes power supply, one MFR-H1-SC soldering cartridge handpiece and workstand
No. 551SO2210 .....$495.00

MFR-2220 System
Includes power supply, one MFR-H2-ST soldering tip handpiece and workstand
No. 551SO2220 .....$495.00

MFR-2240 System
Includes power supply, one MFR-H4-TW precision tweezers handpiece and workstand
No. 551SO2240 .....$598.00

MFR-2211 System
Includes power supply, two MFR-H1-SC soldering cartridge handpieces and two workstands
No. 551SO1122 .....$641.00

MFR-2222 System
Includes power supply, two MFR-H2-ST soldering tip handpieces and two workstands
No. 551SO1222 .....$641.00

MFR-2241 System
Includes power supply, one MFR-H4-TW precision tweezers, one MFR-H1-SC soldering cartridge handpiece and two workstands
No. 551SO2241 .....$744.00

Upgrade Kits:

MFR-UK1
MFR-H1-SC soldering cartridge handpiece and workstand
No. 551SO2291 .....$146.00

MFR-UK2
MFR-H2-ST soldering tip handpiece and workstand
No. 551SO2293 .....$146.00

MFR-UK4
MFR-H4-TW precision tweezers handpiece and workstand
No. 551SO2295 .....$249.00

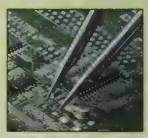
MFR-2200 Series Hand-pieces

A.	MFR-H4-TW	Precision Tweezers
B.	MFR-H2-ST	Soldering Tip
C.	MFR-H1-SC	Soldering Cartridge

Features & Benefits

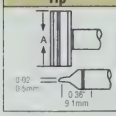
- Adapts to production work, touch-up soldering and SMD rework.
- Changing from one to two handpiece operation is as easy as flipping a front panel switch
- Handpiece MFR-H1-SC accepts a wide range of cartridges including fine-access soldering tips, SMD rework tips.
- Handpiece MFR-H2-ST delivers high power and excels in production soldering. Optional BGA pad clean-up blade tips available.
- All handpieces are ergonomic for operator safety and comfort.

The cartridge hand-piece uses small diameter cartridges for easy access and includes a full range for SMD rework, The precision tweezers rework SMD components with fine dimension to large geometries, while the soldering tip hand-piece has exceptional power for production soldering.



Blade Style BGA Pad Clean-Up Tips

Designed for BGA pad clean-up. Used with MFR-H2-ST handpiece on MFR-2220 or MFR-2222 rework systems. Ideal for solder removal and pad leveling applications on FR4/glass fiber boards.

Tip	TT No.	Model No.	"A" Dimension	PRICE
	551SO3810	CFV-BL100	10 mm	$59.00
	551SO3825	CFV-BL250	25mm	$69.00
	551SO3835	CFV-BL350	35mm	$69.00
	551SO3840	CFV-BL400	40mm	$99.00
	551SO3850	CFV-BL500	50mm	$119.00

The All-in-one Solution!

MFR Series Multi-Function Rework Systems

Perform all your production soldering, rework and desoldering tasks with just one tool. The Multi Function Rework Systems (MFR) not only expertly perform rework, they also have a choice of comprehensive tools for SMT and through-hole soldering. ***METCAL*** SmartHeat® technology makes it ideal for lead-free soldering. Choose versatile, cost-effective heater tips or cartridges suited for high performance and rework. Auto Standby and Auto Off functions save tip life. Motion detection in Auto sleep workstand brings unit back to life when you take handpiece from cradle. Specially designed lead-free workstand provides efficient tip cleaning and maintenance options.

551SO661

Soldering and Rework System

Performance to suit even the most demanding SMT removal and placement applications. Cartridges provide fast thermal performance and respond quickly to load demands. Small shaft diameter provides access to cramped rework areas. **Includes:** Two port power supply, soldering and rework handpiece, workstand.
No. 551SO661 (MFR-SRC) **$495.00**

551SO662

Production Soldering

METCAL SmartHeat® technology provides the performance for lead-free and regular solder. Innovative tip design delivers lower cost of ownership. **Includes:** Two port power supply, production soldering handpiece, workstand.
No. 551SO662 (MFR-PST) **$495.00**

Precision Tweezer, Soldering and Rework System

Features economically designed, lightweight tweezer for removing even the smallest of discrete components such as 0201 packages. Double-sided pivot for true tweezer action, dual position pitch adjustment to help operator target component. **Includes:** Two port power supply, precision tweezer with workstand, cartridge solder/rework handpiece with workstand.
No. 551SO663 (MFR-PTZ).....**$744.00**

551SO663

Upgrade Kits

Fit any MFR system. Includes handpiece and workstand.

TT No.	OK No.	Description	PRICE
551SO6693	MFR-SRC-AD	Solder/Rework Cartridge Upgrade Kit	$146.00
551SO6695	MFR-PTZ-AD	Precision Tweezer Upgrade Kit,	$249.00
551SO6697	MFR-PST-AD	Production Solder Tip Upgrade Kit	$146.00

Desoldering Systems

Provides superior thermal transfer to the joint, effectively reflowing then quickly and efficiently removing all solder. ***METCAL*** SmartHeat® technology makes through-hole desoldering easy and safe from board damage. State-of-the-art handpiece can be adjusted from pencil to gun with a simple press of a button. Paper solder collection chamber and filter system is quick and easy to change and provides low cost maintenance. Available for use with shop air or with internal air pump. **Includes:** Two port power supply, desolder handpiece with workstand.

Shop air required (MFR-DSX)
No. 551SO666 .....**$658.00**
Self-contained air pump (MFR-DSI)
No. 551SO667 .....**$718.00**

551SO667

551SO668

Complete Soldering, Desoldering and Rework Systems

Includes both the innovative desoldering handpiece and solder/rework cartridge handpiece to cover all rework needs. Available for use with shop air or with internal air pump. **Includes:** Two port power supply, soldering and rework handpiece with workstand, desolder handpiece with workstand.

Shop air required (MFR-SDX)
No. 551SO668 .....**$804.00**

Self-contained air pump (MFR-SDI)
No. 551SO669 .....**$864.00**

Soldering Tips for the MFR Series

OKI OK INTERNATIONAL

Cartridge Tips for Soldering/Rework Handpiece					
Tip	TT No.	Oki No.	Style	Dimension	PRICE/Ea.
	551S06601	SFP-BVL10	Bevel 60°, Long	0.04" (1.0mm)	$18.00
	551S06602	SFP-CH10	Chisel 30°	0.04" (1.0mm)	$13.00
	551S06603	SFP-CH15	Chisel 30°	0.06" (1.5mm)	$13.00
	551S06604	SFP-CH20	Chisel 30°	0.08" (2.0mm)	$13.00
	551S06605	SFP-CH25	Chisel 30°	0.10" (2.5mm)	$13.00
	551S06606	SFP-CH50	Chisel 30°	0.20" (5.0mm)	$13.00
	551S06607	SFP-CHB15	Chisel 30°, Bent	0.06" (1.5mm)	$18.00
	551S06611	SFP-CNB04	Conical, Bent	0.016" (0.4mm)	$13.00
	551S06612	SFP-CNB05	Conical, Bent	0.02" (0.5mm)	$13.00
	551S06613	SFP-CNL04	Conical, Long	0.016" (0.4mm)	$13.00
	551S06614	SFP-DRH05	Drag Hoof	0.02" (0.5mm)	$25.00
	551S06615	SFP-DRH15	Drag Hoof	0.06" (1.5mm)	$25.00

Tips for Precision Tweezer Handpiece					
Tip	TT No.	Oki No.	Style	Dimension	PRICE/Ea.
	551S07725	TFP-BLP1	Blade	0.04" (1.0mm)	$55.00
	551S07726	TFP-BLP2	Blade	0.08" (2.0mm)	$55.00
	551S07727	TFP-CNP1	Conical	0.015" (0.4mm)	$55.00
	551S02084	TFP-BLH40	Blade	0.25" (6.35mm)	$70.00
	551S02085	TFP-BLH50	Blade	0.62" (16mm)	$90.00
	551S02086	TFP-BLH60	Blade	0.81" (20.5mm)	$90.00
	551S02087	TFP-BLH70	Blade	1.10" (28mm)	$90.00

Tips for Production Soldering Handpiece and PS-800E Station					
Tip	TT No.	Oki No.	Style	Dimension	PRICE/Ea.
	551S07934	SFV-CH20	Chisel	0.07" (1.80mm)	$8.00
	551S07935	SFV-CH25	Chisel	0.10" (2.5mm)	$8.00
	551S07936	SFV-CH50	Chisel	0.20" (5.0mm)	$10.00
	551S07938	SFV-CN05	Conical	0.02" (0.5mm)	$10.00
	551S07939	SFV-CNB05	Conical, Bent	0.02" (0.5mm)	$8.00
	551S07940	SFV-CNL04	Conical, Long	0.016" (0.4mm)	$10.00
	551S07941	SFV-CNL10	Conical, Long	0.04" (1.0mm)	$10.00
	551S07942	SFV-CNL14	Conical, Long	0.056" (1.4mm)	$10.00
	551S07945	SFV-CNL20	Long Conical	.08" (2.0mm)	$10.00
	551S07944	SFV-DRH20	Drag Hoof	0.08" (2.0mm)	$10.00
	551S07943	SFV-DRK50	Knife	0.2" (5.0mm)	$10.00

Cartridge Tips for Soldering/Rework Handpiece					
Tip	TT No.	Oki No.	Style	Dimension	PRICE/Ea.
	551S07618	RFP-BL1	Blade	0.4" (10mm)	$83.00
	551S07619	RFP-BL2	Blade	0.63" (16mm)	$83.00
	551S07620	RFP-BL3	Blade	0.87" (22mm)	$83.00
	551S07621	RFP-DL1	Tunnel	SOIC 14-16 Chip	$41.75
	551S07622	RFP-DL2	Tunnel	SOIC 8 Chip	$41.75

Desoldering Cartridges				
Tip	TT No.	Oki No.	Dimensions (A x B)	PRICE/Ea.
	551S08046	DFP-CN4	0.04" (1.02mm) X 0.09" (2.3mm)	$35.00
	551S08049	DFP-CN7	0.095" (2.41mm) X 0.14" (3.6mm)	$35.00

Convection Tools

OKI OK INTERNATIONAL

PCT-100 Pre-Heater Convection Tool

Accelerates and enhances lead-free rework. Uses convection air heat to maximize responsiveness and avoid temperature overshoot. Use with or without board holder for hand assembly or rework tasks on surface mount or through-hole assemblies. Unit eliminates thermal shock by following a controlled slope to a desired temperature. 10cfm fan fitted enhances both heating and cooling, reducing total cycle time.

Features:

- Adjustable knob controls temperature to below 300°C
- Thermocouple feedback temperature control regulates output temperature
- System safety feature automatically shuts off heating when fan is stopped
- ESD safe

Can be used alone or combined with PCB holder and arm rest.

Pre-heater convection tool with arm rest and board holder, 120VAC
No. 551S0241 .....**$595.00**

Pre-heater convection tool only, 120 VAC
A. No. 551S0248 .....**$325.00**

Board Holder - PCB size 12" W max, 2.5"W min.
B. No. 551S0247 .....**$250.00**

Arm rest
C. No. 551S0245 .....**$65.00**

OKI OK INTERNATIONAL

HCT-900 Hand Held Convection Tool

Versatile hot air tool for soldering and desoldering applications from 0201 to 304 pin QFP. Low-cost with a simple, robust design comprising of analog controls for both airflow and heat. Closed loop feedback circuit controls and maintains desired temperature. Unique low noise air pump provides precise airflow control. Power off/cool down function retains airflow through the handpiece while the unit powers down, providing efficient heater cooling and reducing thermal stress. Supplied with a single jet H-D50 0.2" (5.0mm) nozzle. **Specs:** 115VAC; Power: 320W; air pump type: Diaphragm; Air flow: 6-25 l/min; Temperature: 212-932°F (100-500°C); Noise level: Less than 46 dBA.
No. 551S0911 .....**$550.00**

Nozzle Kit for Chip Resistors, SOIC & TSOP packages. **Includes:** H-D25, H-SL16, H-SL28, H-SOJ40, H-TS48
No. 551S0913 (NZKT-1) **$270.00**

Nozzle Kit for PLCC, QFP & BQFP packages. **Includes:** H-P20, H-P44, H-P84, H-Q1420, H-Q2626
No. 551S0914 (NZKT-2) **$350.00**

OKi PS-900 & PS-800 Soldering Systems

OKi PS-900 Soldering System

Powered by SmartHeat® technology to ensure cost-effective, repeatable, high-quality soldering. Exceptional thermal control in a small benchtop footprint. Ideal for high thermal demand applications like lead-free soldering and multi-layer boards while operating at lower temperatures for more production and less damage. Features a simple design, low maintenance and requires no calibrations. Uses SFV Series high-quality tips assuring low ongoing operating costs. **Includes:** power supply, handpiece with cord and coil assembly, workstand. *Tips sold separately.*

Features: SmartHeat™ temperature control-Fixed temperature, variable power with no thermal over-shoot, Economic, lightweight handle increases operator comfort and productivity, Rugged cast aluminum housing provides exceptional durability, Auto-sleep workstand reduces tip oxidation and increases tip life, Low cost, quick-change coil assembly for minimum operator downtime

No. 551SO901.....**$249.00**

PS-800E High Power Soldering System

New coil assembly and tip design produces a larger conductive area for more efficient transfer of thermal energy. You get maximum thermal performance without having to increase tip idle temperatures. **Includes:** Power supply and cord, handpiece and cord, workstand, sponge, cartridge removal pad. ***Uses series SFV tips.***

No. 551SO850 .....**$199.00**

PS-800 Soldering System

Includes: Power supply, cord, handpiece and cord, workstand, sponge, cartridge removal pad. ***Uses series PHT tips.***

No. 551SO800 .....**$199.00**

PS-800, PS-800E & PS-900 Accessories

Coil Assembly (PS-800)
No. 551SO845 (PS-CA1).....**$25.00**
Soldering Handle with Coil Assembly (PS-800)
No. 551SO843 (PS-HC1).....**$59.00**
Coil Assembly (PS-800E)
No. 551SO100 (PS-CA2).....**$25.00**

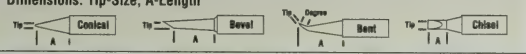
Soldering Handle with Coil Assembly (PS800E)
No. 551SO853 (PS-HC2).....**$59.00**
Coil assembly (PS-900)
No. 551SO339 (PS-CA3).....**$19.00**
Handpiece with cord and coil assembly (PS-900)
No. 551SO309 (PS-HC3).....**$64.00**

Auto-sleep workstand
No. 551SO202 black cradle **$30.00**
No. 551SO8392 green cradle **$30.00**
Cartridge removal pad
No. 551SO024 (AC-CP2).....**$6.18**

PS-800 PHT Series Soldering Heater Tips

Tip	TT No.	Temp Series	Model No.	Shape	Dims. mm (inches) Tip	Dims. mm (inches) A	PRICE
	551SO8915	700	PHT-700315	Fine	1.0 (.04)	11 (.43)	$9.00
	551SO4915	750	PHT-750315		1.0 (.04)	11 (.43)	$9.00
	551SO5326	700	PHT-700326	Chisel	1.5 (.06)	11.9 (.47)	$10.00
	551SO2326	750	PHT-750326	Fine	1.5 (.06)	11.9 (.47)	$10.00
	551SO8935	700	PHT-700335	Fine	1.78 (.07)	9.9 (.39)	$8.00
	551SO4935	750	PHT-750335		1.78 (.07)	9.9 (.39)	$8.00
	551SO8559	700	PHT-701355	Chisel	2.5 (.10)	9.9 (.39)	$8.00
	551SO8159	750	PHT-751355		2.5 (.10)	9.9 (.39)	$8.00
	551SO8932	700	PHT-700325	Chisel	1.5 (.06)	9.9 (.39)	$9.00
	551SO4932	750	PHT-750325		1.5 (.06)	9.9 (.39)	$9.00
	551SO8967	700	PHT-701367	Chisel	3.0 (.12)	16.5 (.65)	$10.00
	551SO4967	750	PHT-751367		3.0 (.12)	16.5 (.65)	$10.00
	551SO8984	700	PHT-701384	Chisel	5.0 (.20)	7.6 (.30)	$9.00
	551SO4984	750	PHT-751384		5.0 (.20)	7.6 (.30)	$9.00
	551SO8917	700	PHT-702017	Conical	0.4 (.016	14.7 (.58)	$9.00
	551SO2017	750	PHT-752017		0.4 (.016	14.7 (.58)	$9.00
	551SO8957	700	PHT-702057	Fine	1.0 (.04)	13.5 (.53)	$10.00
	551SO4957	750	PHT-752057		1.0 (.04)	13.5 (.53)	$10.00
	551SO8927	700	PHT-702327	Conical	0.4 (.016)	16.0 (.63)	$9.00
	551SO2327	750	PHT-752327	Fine Bent	0.4 (.016)	16.0 (.63)	$9.00

Dimensions: Tip-Size; A-Length



PS-800E & PS-900 SFV Series Easy Access Soldering Heater Tips

Tip	TT No.	Model No.	Shape	Dims. mm (inches) Tip	Dims. mm (inches) A	PRICE
	551SO8430	SFV-DRH430A	Hoof	3.0 (.12")	20.4 (0.8")	$11.00
	551SO8511	SFV-CH10A	Chisel	1.0 (.04")	13.7 (.54")	$11.00
	551SO8520	SFV-DRH420A	Hoof	2.0 (.08")	20.7 (.81")	$12.00
	551SO8503	SFV-CNL03A	Conical	0.3 (.01")	18.4 (.724")	$11.00
	551SO8504	SFV-CNB04A	Conical	0.4 (.016")	19.6 (.77")	$11.00
	551SO8505	SFV-CN05A	Conical	0.5 (.02")	13.7 (0.53")	$11.00
	551SO8510	SFV-CNL10A	Conical	1.0 (0.4")	15 (.59")	$11.00
	551SO8518	SFV-CH18A	Fine	1.8 (.07")	13.4 (.528")	$11.00
	551SO8515	SFV-CH15A	Chisel	1.5 (.06")	13.4 (.528")	$11.00
	551SO8525	SFV-CH25A	Chisel	2.5 (.10")	13.4 (.528")	$11.00
	551SO8550	SFV-CH50A	Chisel	5.0 (.197")	11.7 (.461")	$11.00
	551SO8545	SFV-DRK45A	Knife	4.5 (.177")	18.7 (.74")	$11.00
	551SO8512	SFV-DRK30A	Knife	3.0 (.12")	18.7 (.74")	$11.00

METCAL QX2

QX2 Convection Rework Systems

CALL FOR A DEMO IN YOUR AREA!

From the moment you take it out of the box, you know the QX2 is like no other convection system. Set-up is fast and easy, requiring no special tools, fixturing, or testing. During the removal cycle, the vacuum pick-up automatically lifts the component from the board when the solder reflows, and then shuts off the heat. The time used in the removal cycle is stored and displayed as a guide for establishing the minimum time to reattach a similar component. To vary heating all that is required is that the airflow level be adjusted. This makes optimizing heat delivery very simple. An easy-to-use underboard preheater is available to heat boards evenly and prevent warping during the rework of large components and multi-layered boards. **Specs**: Input voltage: 90-132 VAC; Convection system: Heater: 550W, Rated current: 5A, Air flow: 20 to 50L/min: Preheater: Heater: 950W, Rated current: 8.5A, heating surface: 6" x 6". **Features:** Self-Contained vacuum; Movable controller with: Start/Stop button; Airflow control; Time control; LCD display; Remove/Attach control; Auxiliary thermocouple port for component/board temperature monitoring. **(USA)**

QX2 System with board holder, controller and preheater.
No. 551PR811 .....**$4,750.00**

PLATO *Replacement tips fit these different manufacturers. Additional sizes and styles are available. Call for prices.*

Replacement Tips For PACE worldwide

RoHS Compliant

3/16" (4.8mm) Plato® Tips to fit Pace® SP-1A, SP-2A, PS-80, ST-45, IR-70 SODR-PEN® Soldering Irons

Tip	TT No.	Pace P/N	Description	Tip Size Inch (mm)	PRICE
33-8142	657TI142	1121-0336	Conical Tip	1/32" (0.8)	$5.19
33-8141	657TI141	1121-0357	Conical Tip	1/64" (0.4)	$5.19
33-6056	657TI056	1121-0414	Screwdriver Tip	1/16" (1.6)	$5.19
33-1147	657TI147	1121-0499	Screwdriver Tip	1/16" (1.6)	$5.19
33-6895	657TI895	1121-0490	SMD Flow Tip	.195" (5.0)	$4.87

3/16" (4.8mm) Plato® Tips to fit Pace® SX-65A & SX-70 SODR-X-TRACTORS

Tip	TT No.	Pace® Economy Grade	D1	D2	PRICE
D2	657TI003	1121-0505	.030" (0.8)	.075" (2.9)	$5.60
	657TI300	1121-0367	.030" (0.8)	.065" (1.7)	$5.60
D1	657TI400	1121-0342	.040" (1.0)	.085" (2.2)	$5.60
	657TI600	1121-0368	.060" (1.5)	.115" (2.9)	$5.60

Replacement Tips For Weller®

RoHS Compliant

Fit Weller® Stations EC-1002, EC-2002, MC-5001, WCC-100, WTL-1000, DTL-1000, DEC-1000 used with EC1201A, EC-1201AFE, X1201AFE & WCC-101 Handpiece

Tip	TT No.	Weller No.	Plato No.	Description	Tip Size	PRICE
	657SO303	ETA	EW-303	Screwdriver Tip	1/16"	$4.46
	657TI305	ETB	EW-305	Screwdriver Tip	3/32"	$4.46
	657TI307	ETC	EW-307	Screwdriver Tip	1/8"	$4.46
	657TI301	ETH	EW-301	Screwdriver Tip	1/32"	$4.46
	657TI302	ETJ	EW-302	Long Screwdriver	1/32"	$4.46
	657SO306	ETL	EW-306	Long Screwdriver	5/64"	$4.46
	657TI403	ETP	EW-403	Conical Tip	1/32"	$4.46
	657TI402	ETS	EW-402	Long Conical	1/64"	$4.46
	657TI0602	—	EW-0602	SMD	.020"	$8.23

Replacement Tips For HAKKO

RoHS Compliant

Plato® Tips to fit Hakko® 702, 703, 926, 927, 928, 933, 936, 937 Soldering Stations with Handpiece M926, 900M or 907 ESD, and O.K. Industries SA1000 Station with SAI-640 Handpiece

Tip	TT No.	Hakko P/N	Description	Tip Size Inch (mm)	PRICE
cHS-5701	657TI701	900M-T-1C	Bevel Tip	3/64" (1.2)	$5.01
cHS-2751	657TI751	900M-T-1.6D	Chisel Tip	1/16" (1.6)	$5.01
cHS-2752	657TI752	900M-T-2.4D	Screwdriver Tip	3/32" (2.4)	$5.01
cHS-2753	657TI753	900M-T-3.2D	Screwdriver Tip	1/8" (3.2)	$5.01
cHS-4785	657TI785	900M-T-B	Conical Tip	.040" (1.0)	$5.01
cHS-4787	657TI787	900M-T-I	Conical Tip	1/64" (0.4)	$5.63
cHS-0927	657TI927	900M-T-K	SMD Blade	1/4" (6.3)	$7.52

Replacement Tips For EDSYN

Plato® Tips to fit Edsyn® Loner Soldering Irons

RoHS Compliant

	TT No.	Plato No.	Edsyn No.	PRICE
E-2621	657TI621	E-2621	LT-375	$8.28
E-2622	657TI622	E-2622	LT-376	$8.28
E-4709	657TI709	E-4709	LT-374	$8.28
E-4710	657SO4710	E-4710	LT-429	$8.28
E-4781	657TI781	E-4781	LT-383	$8.28

HEXACON

Therm-O-Trac Soldering Station

High reliability and accurate temperature control are yours with Thermo-O-Trac stations. Continuously adjustable from 525°F to 850°F, the station boasts less than ±10°F variance at idle temperature. Temperature is controlled by a thermistor positioned at the working end of the tip, which continually senses temperature and corrects for temperature variations immediately by adjusting the power through a closed loop, zero voltage switching circuit. Station can be easily calibrated in the field. **(USA)**

No. 432IR012 .....$323.08

PLATO Replacement Tips for Hexacon Therm-O-Trac

	TT No.	Plato Part No.	Hexacon Part No.	Tip Size (mm)	PRICE
CH-3489	657TI489	CH-3489	J301X	1/16"(1.6)	$8.10
CH-3534	657SO3534	CH-3534	J302X	1/8"(3.2)	$8.10
CH-3550	657SO3550	CH-3550	J101X	1/8"(3.2)	$8.10

HEXACON

Micro-Stedi Soldering Station

Looking for a soldering station for fine line circuitry, subminiature and small terminal work? The Micro-Stedi station, with compact footprint and lightweight subminiature handpiece, incorporates a 24V ceramic element with performance characteristics equal to many larger units. Employs a thermally self-compensating circuit and holds stable soldering temperatures at the value selected on the base unit, variable 350°F to 900°F.

No. 432SO1500 .....$148.71

	TT No.	Plato Part No.	Hexacon Part No.	Tip Size (mm)	PRICE
CH-3551	657SO3551	CH-3551	J102X	3/16"(4.8)	$8.10
CH-3868	657SO868	CH-3868	J912X	1/32"(0.8)	$8.46
CH-4427	657TI427	CH-4427	J915X	1/32"(0.8)	$8.10

Reliable and cost efficient!

RoHS Compliant

Loner Temperature Controlled Soldering Stations

High reliability and cost efficiency make these stations ideal for the assembly line. Model 952SX Dual temperature control allows both standard and heavy-duty soldering with one unit. **Features:** Accurate linear temperature control for consistent soldering; Easy to maintain and calibrate; Modular assembly of parts for ease-of-service; Wide variety of soldering and SMT CROWN tips available. **Includes:** Soldering station and tip; (2 in Model 952SX) Tool pods; Sponge holder with cleaning sponge, leveling pad and liner; Low static computer aid. **Specs:** Power requirements: 120V, 60Hz.; Power rating: 15W – 220W; Heater rating: 120V, 95W; Temperature range: 400°-800°F (205°-427°C); Temperature regulation: ±6°F (±3°C); Tip-to-ground voltage leakage/Resistance: <2V/<2 ohms; Dimensions: 4.1"W x 8.2"H x 10"D (104mm W x 208mm H x 254mm D); Weight: 3.1lbs/1.4 kg. (952SX), 2.5lbs/1.1kg (951SX).

Model 951SX (Shown)
Single temperature controlled Station
No. 330ED159 .....$129.55

Model 952SX (Not Shown)
Dual temperature controlled Station
No. 330ED954 .....$421.66

Loner High Performance Temperature Controlled Soldering Station

RoHS Compliant

Versatile modular design allows for easy and economical conversion to fume extraction or hot air. Direct tip heater configuration results in quick heat-up and recovery. Advanced circuit design provides precise temperature control and external calibration. Front loading design makes tip changes faster and easier. Can be used with a wide variety of tips. **Specs:** Power requirements: 120VAC, 60Hz; Power Rating: 15W-220W; Heater rating: 120VAC, 95W; Temperature range: 400° to 800°F (205° to 427°C); Tip-to-ground voltage leakage/resistance: <2mV/<2ohms; Dimensions: 4.1"W x 8.2"H x 10"D (104mm x 208mm x 254mm) **Includes:** Soldering station and tip, tool pod, sponge holder w/cleaning sponge, pad and liner.
No. 330SO971 .....$264.23

Edsyn Loner Soldering Tips

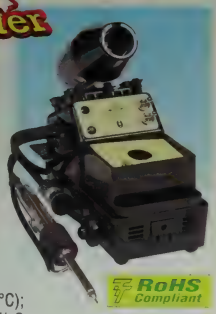
Tip	TT No.	Mfg No.	Style	Width (A)	Length (B)	PRICE
	330ED429	LT429	Conical	.02" (0.5mm)	.74' (18.8mm)	$5.93
	330ED382	LT382	Conical	.02" (0.5mm)	.62" (15.8mm)	$5.93
	330ED608	LT374	Conical	.03" (0.8mm)	.48' (12.2mm)	$5.93
	330SO3751	LT371LF	Spade	.04" (1.0mm)	.78" (19.8mm)	$7.60
	330ED612	LT375	Spade	.06" (1.5mm)	.48" (12.2mm)	$5.93
	330TI431	LT431	Spade	.07" (1.8mm)	.74' (18.8mm)	$7.71
	330ED618	LT394	Spade	.07" (1.8mm)	.93" (23.6mm)	$7.71
	330ED622	LT395	Spade	.09" (2.3mm)	.74' (18.8mm)	$7.71
	330ED616	LT376	Spade	.12" (3.0mm)	.48" (12.2mm)	$5.93
	330SO573*	LT375LF	Spade	.06" (1.5mm)	.48" (12.2mm)	$6.50
	330SO374*	LT374LF	Conical	.03" (0.8mm)	.48" (12.2mm)	$6.85
	330TI6021	LT602-1	Angled Conical	.02" (0.5mm)	.44" (11.2mm)	$3.75

**For lead-free, high temperature soldering*

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.
We reserve the right to correct misprints.

Loner Atmoscope Self-Contained SMT Hot Air Station

Best Seller



RoHS Compliant

Cost-effective and designed for rework on larger components. Self-contained and provides power and precision for components up to 84 pins (208 QFP). **Features:** Built-in air source; Zero crossing circuitry; Expands to include optional soldering iron; 95 watt heater provides power for larger components. **Includes:** Power supply; Hot air hand tool with tip; Tool pod; Sponge holder with liner, sponge and pad. **Specs:** Power requirements: 120V, 60 Hz; Power rating: 150W; Heater rating: 120V, 95W; Temperature range: 400°-800°F (205°-427°C); Temperature regulation: ±6°F (±3°C); Tip-to-ground voltage leakage/Resistance: <2mV/<2 ; Dimensions: 5.2"W x 8.5"H x 10"D (132mmW x 216mmH x 254mm D); Weight: Power supply 4.3 lbs/1.9 kg, Hand tool: 6 oz./170 g.
No. 330ED1036 .....$529.95

Edsyn Loner Nozzles for Hot Air Stations

(For use with 330SO972 & 330ED1036)

Tip	TT No.	Mfg No.	Style	Hole Dia. (A)	Length (B)	PRICE
	330ED652	LT427	Single	.02" (0.5mm)	.38" (9.5mm)	$18.42
	330SO1514	LT514	Single	.10" (2.5mm)	.25" (6.4mm)	$34.28
	330SO535	LT535	Dual Flow	.05" (1.3mm)	.59" (15.0mm)	$32.13
	330SO510	LT510	Bent	.02" (0.5mm)	.65" (16.5mm)	$28.56
	330SO511	LT511	Bent	.06" (1.5mm)	.65" (16.6mm)	$28.56

SMT Hot Air Station

RoHS Compliant

Versatile – use for hot air or traditional contact rework. Modular design offers unique versatility. Temperature controlled with external calibration. Built-in air switch activates air when you lift the tool from the holder. 120V, 60Hz power requirement; 15W-220W power rating. Runs on shop air or nitrogen, 20-80 psi. Temperature range 400°F-800°F (205°C-427°C).
No. 330SO972.....$733.95

SOLDAPULLT® Self-Contained Deluxe Hot Tip Desoldering Station

RoHS Compliant

A self-contained, high performance and cost-efficient desoldering station that delivers maximum heat transfer with zero crossing circuitry for ESD-safe operation. **Features:** Powerful 70W high output PTC element makes heavy multi-layer boards easy to desolder.; Adjustable hand tool design provides comfortable working angles; Powerful vacuum pulse from stored vacuum in hose, 21" Hg minimum; Single burn resistant cord for power and vacuum; External calibration helps with ISO9000 compliance. **Specs:** Power requirements: 120V, 60Hz; Power rating: 95W-200W; Heater rating: 24V, 70W; Temp. range: 400° to 800°F (205° to 427°C). Dimensions: 5"W x 8.5"H x 9"D (127mm x 216mm x 229mm).
No. 330SO005.....$529.95

Edsyn Desoldering Tips

Tip	TT No.	Mfg No.	Hole Dia. (A)	Length (B)	PRICE
	330ED012	ZD12	.03" (0.8mm)	.50" (12.7mm)	$13.80
	330ED013	ZD13	.04" (1.0mm)	.50" (12.7mm)	$13.46
	330ED014	ZD14	.06" (1.5mm)	.50" (12.7mm)	$13.46
	330ED018	ZD18	.07" (1.8mm)	.50" (12.7mm)	$13.46
	330ED113	ZD113	.04" (1.0mm)	.48" (12.2mm)	$15.53
	330ED115	ZD115	.07" (1.8mm)	1.22" (31.0mm)	$15.53

Edsyn Replacement Filter for ZD500DX Station, 10/Pk
No. 330AC625 .....$8.13

American Beauty

Tackle your difficult soldering applications with the power of Resistance Soldering!

Resistance Soldering Systems

- Heating is instantaneous & confined to solder connection
- Solder many times faster than traditional irons
- Handpieces cool extremely fast, reducing risk of needless injury
- Perfect for working in confined spaces
- Footswitch allows for "hands-free" operation
- Electrode replacement costs many times less than soldering tips
- Handpieces are considerably lighter than irons
- Creates additional savings due to power efficiency

A. Micro Tweezer Style
Common Applications: Micro soldering applications in limited space, Fine AWG wire processing. 100W max.
No. 138SO599.....**$392.85**

B. Standard Capacity Tweezer Style
Common Applications: Micro and miniature set-ups, Wire processing, Termination, Small connections. 250W max.
No. 138SO502.....**$446.45**

High Capacity Tweezer Style
Common Applications: Antenna leads, Coaxial cable, Connections up to 1/4" lugs and posts. 250W max.
No. 138SO504.....**$533.95**

C. High Capacity Plier Style
Common Applications: Termination up to 1/2", Rebuilds large connectors, Microwave housings. 1,100W max.
No. 138SO507.....**$803.60**

D. Precision Timer Module
Common Applications: Incorporate repeatability to the 100th of a second into your resistance soldering applications.
No. 138SO105 (105PTM) **$663.00**

Resistance Soldering Systems are std. 120 VAC, 60HZ with 3 wire NEMA plug. *(Also Available on special order for 220/240 VAC.)*

American Beauty

Industrial Grade Soldering Irons

Modular soldering irons designed to handle stress and strain of high production environments. **Features:** Higher heat capacity means less waiting time between solder joints; Steel construction ensures extraordinary durability; Deep-seated, Paragon™ iron-clad plug-type tip outlasts ordinary tips and provides quick heat transfer; Reliable Ni-Chrome wound heating element; Baffles deflect heat from handle. **Includes:** Iron, tip and stand.

100W Iron Model 3138
Max tip temperature: 855°F (457°C);
Tip shank diameter: 3/8" (9.5mm)
No 138SO100 .....**$107.15**
No 138SO043 Repl. Tip 43D **$11.65**

200W Iron Model 3158
Max tip temperature: 1000°F (538°C);
Tip shank diameter: 5/8" (15.9mm)
No 138IR582.....**$147.30**
No 138SO1744 Repl. Tip 44D **$25.00**

300W Iron Model 3178
Max tip temperature: 1000°F (538°C);
Tip shank diameter: 7/8" (22.2mm)
No 138SO783 .....**$189.30**
No 138TI450 Repl. Tip 45C **$46.45**

550W Iron Model 3198
Max tip temperature: 1010°F (543°C);
Tip shank diameter: 1-1/8" (28.6mm)
No 138SO198 .....**$248.25**
No 138SO046 Repl.Tip 46C.....**$69.65**

Voltage Control Station Model V3700
Voltage control unit for use with American Beauty mid-range and heavy-duty soldering irons and general purpose solder pots 300 (138SO012) and 600 (138SO048). Dial any power you need from 30% to 100% of line voltage.
No. 138SO700 .....**$150.30**

American Beauty

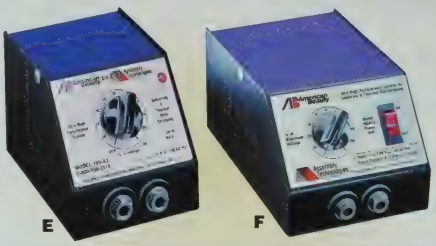
Power Units

100 Watt Infinitely Variable Power Unit
E. No. 138IR092 (105A3).....**$241.10**

100 Watt Infinitely Variable Power Unit with Auto Switching
No. 138SO103 (105A3T) **$285.75**

250 Watt
Infinitely Variable Power Unit
F. No. 138IR088 (105A12) **$316.95**

1,100 Watt
Selectively Variable Power Unit
No. 138SO522 (105B2) **$608.95**



Footswitch - *For use with 138SO599, 138SO502, 138SO504, 138SO507, 138IR106*
No. 138IR038 (10519).....**$42.90**

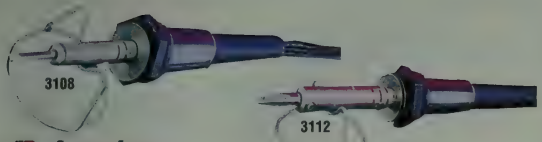
Replacement Handpieces, Electrodes and Elements

Tweezer-Type Handpiece
Handpiece for perfect contact-control in soldering micro-miniature setups. Use with 15W to 100W power. Length 5", Wt. 4 oz.
No. 138IR062.....**$116.10**
No. 138IR064 Electrodes .....**$15.25 6/Pk.**

Micro-Soldering/Tweezer
S.S. electrodes, .040", replaceable. 15W to 100W.
No. 138IR026.....**$116.10**
No. 138IR028 Electrodes.....**$8.05 6/Pk.**

Heavy-Duty/ Tweezer-Type
Use with variable power unit. Both ends are reversible. Wt: 9 oz. 15W to 250W.
No. 138IR018 .....**$201.80**
No. 138IR086 Electrodes **$41.95**

High-Heat Carbon Pliers
No. 138SO258.....**$216.10**
No. 138SO159 Electrodes **$20.55**



American Beauty

Industrial Grade Soldering Irons

Modular soldering irons designed to handle stress and strain of high production environments. **Features:** Higher heat capacity means less waiting time between joints; Steel construction ensures extraordinary durability; Deep-seated, Paragon™ iron-clad plug-type tip outlasts ordinary tips and provides quick heat transfer; Reliable Ni-Chrome wound heating element; Baffles deflect heat from handle; Little Dandy irons feature a pencil style for precise control.

Little Dandy® Soldering Irons with Paragon® Tips

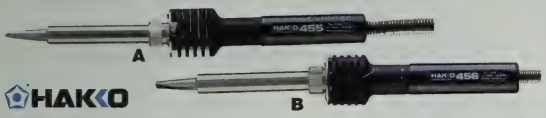
Includes: Iron, tip and stand.

20W Iron Model 3108
Max tip temperature: 805°F (429°C);
Tip shank diameter: 1/8" (3.18mm)
No. 138SO108.....**$49.95**
Replacement Tip 501
No. 138TI501 .....**$8.95**

60W Iron Model 3112
Max tip temperature: 1130°F (538°C);
Tip shank diameter: 1/4" (6.35mm)
No. 138SO112.....**$60.75**
Replacement Tip 720
No. 138SO720.....**$8.95**

Voltage Control Station Model V3600

For use with Models 3108, 3110 and 3112
Voltage control station regulates the supply voltage of Little Dandy® soldering irons Dial any power you need from 30% to 100% of line voltage. **Specs:** Input: 110-120VAC; Output: 30 to 100% of line voltage up to 60 watts. Dimensions: 8-1/2"L X 4"H X 6"W.
No. 138IR238.....**$150.30**



HAKKO

455/456 Soldering Irons

Ceramic heating element provides a longer life than conventional nichrome-iron element. Alloy-coated iron tips ensure long-lasting protection from corrosion. **Specs:** Maximum temperature: 599°C (1110°F); Both come with 5D chisel tip.

A. 455 Soldering Iron, 40W
No. 821SO455.....**$45.37**

B. 456 Soldering Iron, 60 W
No. 821SO616.....**$53.47**

Replacement Tips

Replacement Tips for Hakko 455 Iron			
Tip	TT No.	Description	PRICE
A1052	821TI053	25mm (0.98") Shape-5D Chisel	$13.57
A1047	821SO047	25mm (0.98") Shape-B Conical	$13.47
Replacement Tips for Hakko 456 Iron			
A1026	821TI026	30mm (1.18") Chisel	$16.37
A1179	821TI179	30mm (1.18") Chisel	$16.37

HAKKO

Desoldering Maintenance Kit

Kit Includes: Drill; Wrench; Spring Filters (set of 10); Ceramic Paper Filter (small) (set of 10) (Protects the pump by filtering flux vapors at the desoldering station); Filter Holder; Ceramic Paper Filter (Large) (Set of 10) (Protects the pump by filtering flux vapors at he handpiece); Nozzle Cleaning Pin; Nozzle Cleaning Drill; Filter Holder; Front Holder; Cleaning Sponge; Maintenance Brush.
No. 821SO002 .....**$117.07**

Weller

WLC100 & WLC200 Soldering Stations

AVAILABLE with 40 or 80W IRON!

Best Seller

Features:

- Variable power control from 5-40 watts
- On/off switch with indicator light
- Natural sponge for tip cleaning. Iron has cushioned grip and replaceable heating element.

WLC100 Soldering Station
40-watt pencil iron and ST3 tip.
No. 272SO111 (WLC100).....**$56.96**

WLC200 Soldering Station
Same features with 80-watt iron and MTG20 3/8" tip.
No. 272SO206 (WLC200) ..**$64.50**

Weller

CALL FOR QUANTITY DISCOUNTS

A. SP80L 80 Watt Iron
Medium-duty pencil iron with an on/off indicator light for miscellaneous repairs. 9-3/4" OAL. 3/8" chisel tip. 120V. Uses MTG 20, 21, 22 Series tips. (Mexico)
No. 272IR282 .....**$27.94**

B. SP120 120 Watt Iron
Heavy-duty irons for greater output needed in applications such as auto radiator work or stained glass. 272IR270 is 11-3/8" long. Chisel tip. 120V. Uses MTG 30 Tip. (Mexico)
No. 272IR270 .....**$49.44**

C. SP175 175 Watt Iron
For high mass jobs; 12-1/2" long. Wt. 1 lb. 5/8" chisel tip. 120V. Two wire cord. Uses MTG 40 Tip. (Mexico)
No. 272IR272 .....**$61.26**

D. Marksman SP23L 2 Wire 25W Iron
Fine quality soldering irons featuring stainless-steel barrels, nickel-plated copper tips, heat/impact-resistant handles and an on/off indicator light. Featherweight iron with replaceable tips. 8-1/4"L. 120V. Pencil handle. 1/8" dia. tip. Uses MT series tips. (Mexico)
No. 272IR0230 .....**$12.88**

E. WM120 Thin Pencil Soldering Iron
12W miniature lightweight, pencil thin soldering iron. Weighs 7 oz. and measures 7" less tip. Tip temperature of 800°F. Uses MP series tips. **(USA)**
No. 272IR344 .....**$40.24**

Weller

WSP150 150 Watt Heavy Duty Soldering Pencil

For applications needing a large amount of stored heat. 24-volt pencil requires full use of transformer, so it must be used alone in a dual channel power unit. Compatible with WD2 or WD2M power units. **Features:** Operates up to 950°F; Uses LHT series soldering tips; Maximum output 150W.

Soldering pencil
No. 272SO9150 .....~~**$168.96**~~
SALE PRICE $140.00

LHTE Soldering tip, 6.7mm
No. 272SO4451 .....**$7.97**

LHTD Soldering tip, 4.7mm
No. 272SO4452 .....**$7.97**

LHTF Soldering tip, 9.3mm
No. 272SO4450 .....**$7.97**

Tip nut
No. 272SO7495 .....**$9.79**

Sale Prices Good Until February 28, 2009

Weller® Interchangeable and Replacement Irons

Standard Soldering Irons, Iron Handles and Tips

Complete Irons

Ready-to-use soldering irons feature interchangeable handles, heaters and tips. Handles are three-wire grounded with "soft-touch" grips. Uses PL Series 1/4" Thread-On tips. **(USA)**

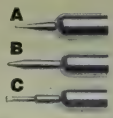
No. 812IR035 Model SL335, 33W, 800°F **$42.61**
No. 812IR045 Model SL345, 45W, 900°F **$45.18**

Modular Heaters for Thread-On Tips

Fits Weller modular irons and handles SL325, SL335, SL345, SL500, 7400, 7500, 7760, 7770

No. 812TI084 (537S) 25 Watt, 700°F **$20.90**
No. 812IR012 (1237S) 33 Watt, 800°F **$22.80**
No. 812TI037 (4037S) 45 Watt, 900°F **$25.01**

PL Series Thread-On Tips



A. No. 812TI300 (PL100) Precision, 0.05" **$5.76**
B. No. 812TI194 (PL111) Pencil, 0.03" **$6.06**
C. No. 812TI210 (PL155) Stepped Chisel, 0.07" **$6.18**

Industrial Soldering Irons

Controlled Output (Series W). High-quality tools with controlled temperature. Selection (600°, 700° or 800°F) by changing tips. 120V, 50/60Hz. Use only with Weller® PH and SF series soldering tool stands to create a complete soldering station. These are automatically-controlled tools and should be used with "non-heat-sinking" Weller stands. **(USA)**

W60P

Versatile 60W iron, a compact 7-1/4" long & light-weight at 2-1/2 oz. Furnished with 700°F, 1/16" screwdriver tip No. 272TI3112 and two wire cord. Uses CT5 Series Tips. **(USA)**

No. 272IR324 ..... **$75.44**

W60P-3

Same as 272IR324, with three wire cord. Uses CT5 Series Tips. **(USA)**

No. 272IR328 ..... **$81.71**

W100PG

For heavy-duty use, this 100W iron is 8-1/4" long. Furnished with 700°F, 3/8" screwdriver tip No. 272TI3160-CT6F7 and two wire cord. Uses CT6 Series Tips. **(USA)**

No. 272IR320 ..... **$61.44**

W100P-3. Same as 272IR320, with three wire cord.
No. 272IR322 ..... **$79.87**

All Controlled Output Irons use CT type tips.

CT Series Tips for W60P and W100P Irons

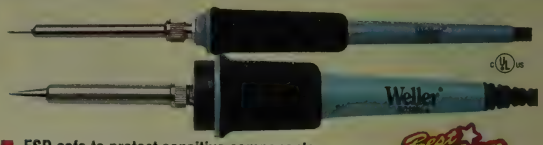
Tinned with lead-free solder.

CT6 Series Soldering Tips

Tip	TT No.	Model No.	Size	Temperature	PRICE
	272TI3148	CT6D7	0.187"	700°F	$6.38
	272TI3150	CT6D8	0.187"	800°F	$6.38
	272TI3160	CT6F7	0.375"	700°F	$6.38
	272TI3162	CT6F8	0.375"	800°F	$6.38

CT5 Series Soldering Tips

Tip	TT No.	Model No.	Size	Temperature	PRICE
	272TI3112	CT5A7	0.062"	700°F	$4.45
	272TI3114	CT5A8	0.062"	800°F	$4.45
	272TI3124	CT5C7	0.125"	700°F	$4.45
	272TI3126	CT5C8	0.125"	800°F	$4.45
	272TI3138	CT5E8	0.250"	800°F	$4.45



- ESD safe to protect sensitive components
- Fitted with non-burnable silicon rubber cord

Easy Seller

20W Iron - EC1302B

Micro-Soldering tool. Uses EPH series tips.
A. No. 272SO302 ..... **$126.59**

40W Iron - EC1201A

General purpose soldering tool. Uses ET series tips.
B. No. 272IR209 ..... **$126.59**

Use with the DEC1001, Silver Series, and EC Soldering Stations, or any WRS Rework station

EPH Series Tips - For EC1302 and EC1301 series irons.

Tip	TT No.	Model No.	Description	Tip Size Inch(mm)	PRICE
	272TI220	EPH101	Micropoint	1/64"(0.4)	$5.47
	272TI235	EPH110	Conical	1/16"(1.6)	$5.47
	272TI234	EPH109	Conical	1/32"(0.8)	$5.47
	272TI230	EPH106	Screwdriver	1/16"(1.6)	$5.47

WP Series Irons and Tips

Small, lightweight handle now with cushioned grip. Quick change, knurled collar makes changing heaters simple. Iron-plated tips for longer life and greater soldering efficiency. Ideal for a wide variety of electronic and electrical work. **(USA)**

WP Series Irons

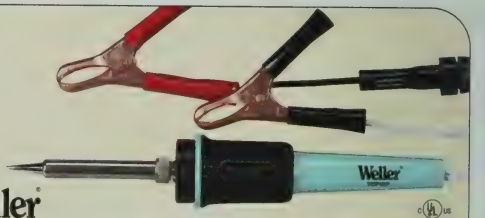
No. 272IR025 (WP25) 25W .. **$39.86**
No. 272IR030 (WP30) 30W .. **$43.07**
No. 272IR035 (WP35) 35W .. **$50.18**

Replacement Heaters

No. 272SO216 25W Iron **$21.25**
No. 272PA030 30W Iron **$25.90**
No. 272PA035 35W Iron **$26.40**

ST Series Tips for WP25, WP30 and WP35 irons

Tip	TT No.	Tip	Description	PRICE
	272TI1130	1/16"	Screwdriver	$3.52
	272TI1132	3/32"	Screwdriver	$3.52
	272TI1128	1/8"	Screwdriver	$3.52
	272TI1134	3/16"	Screwdriver	$3.52
	272TI1136	1/32"	Single Flat	$3.52
	272TI1138	1/32"	Screwdriver	$3.52
	272TI1140	1/32"	Conical	$3.52
	272TI1142	1/16"	Narrow Screwdriver	$3.52



Weller®

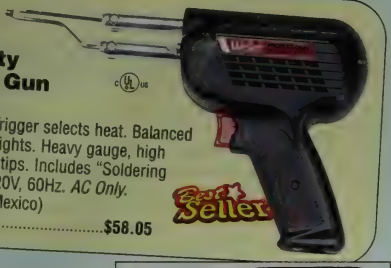
Controlled Output Field Soldering Iron

Versatile controlled tool for field servicing. Operates from 12V battery or low voltage power source. Includes battery clips and 12' fused cord. Soldering iron includes PTA7 tip. Heats to 700°F.

No. 272IR012 ..... **$112.90**

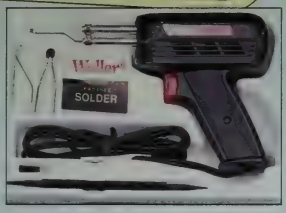
Weller

Heavy-Duty Soldering Gun Kit - 7 pc



Highest output. Trigger selects heat. Balanced pistol grip. Twin lights. Heavy gauge, high efficiency copper tips. Includes "Soldering Hints" booklet. 120V, 60Hz. *AC Only. 200/260 watts.* (Mexico)
No. 272IR080 .....**$58.05**

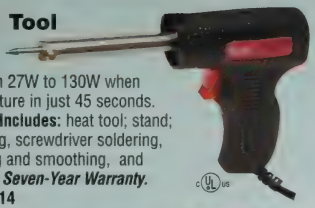
Universal Soldering Gun Kit - 8 pc



Includes dual heat soldering gun, three copper soldering tips, flux brush, soldering aid tool, 60/40 rosin-core solder and carrying case. *UL listed. 100/140 watts.* (Mexico)
No. 272IR058 .....**$42.99**

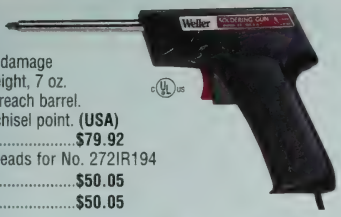
Weller

Therma-Boost Heat Tool



General use 3 oz. tool for soldering, scoring, smoothing and cutting. Trigger boosts power from 27W to 130W when needed. Heats to working temperature in just 45 seconds. Tips are fast and easy to change. **Includes:** heat tool; stand; six multi-use tips: conical soldering, screwdriver soldering, rope cutting, foam cutting, scoring and smoothing, and instructions. 27W/130W, 120VAC. ***Seven-Year Warranty.***
No. 272SO745 .....**$22.14**

Soldering Gun



700°F/370°C capability. Fast, temperature-controlled. Won't damage sensitive components. Lightweight, 7 oz. double coated tips. Slim, long reach barrel. 120V, 700°F, 150W. Tip 3/16" chisel point. **(USA)**
No. 272IR194 .....**$79.92**
Replacement & extra power heads for No. 272IR194
No. 272IR050 700°.....**$50.05**
No. 272IR016 600°.....**$50.05**

Weller

Butane Mini-Iron

Waterproof Piezo ignition for fast, reliable lighting. 30 minute runtime. Adjustable gas flow controls temperature range 750° to 900°F. Uses standard butane gas (sold separately). Also operates as a torch when soldering tip is removed. Includes ML501 1.6 mm conical tip. Lightweight - only 1.58 oz. (45 g).

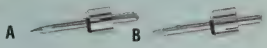
ML500MP Mini-Iron
No. 272SO5900 .....**$17.18**
ML501 Conical Tip, 1.6 mm
No. 272SO5901 .....**$2.21**
ML 502 Chisel Tip, 2.4 mm
No. 272SO5902 .....**$2.21**
ML 503 Hot Knife Tip
No. 272SO5903 .....**$2.21**

Weller

Battery Powered Soldering Tools

Perfect for field service repairs. Heats up to working temperature in under 15 seconds. Protective safety cap turns tool off when placed on. Batteries provide over 150 intermittent solder joints for Pro Series, 120 for standard series. Pro Series features white LED which illuminates working surface. Dual power indicated by red/green LEDs. Co-molded grip for comfortable feel. Working temperature: Pro Series: 850°F/950°F, standard series: 900°F. **Includes:** iron, tip (2 tips with Pro Series), AA batteries, lead-free solder, and tip wrench.

Pro Series Battery Powered Soldering Tool
No. 272SO860 .....**$20.42**
Conical tip for Pro Series
A. No. 272SO8610 ....**$8.86**



Chisel tip for Pro Series
B. No. 272SO8611 ....**$8.86**
Battery Powered Soldering Tool
No. 272SO645 .....**$15.04**

Weller portasol

P2C Butane Soldering Iron Kit

Self-igniting, lightweight, compact cordless butane soldering and hot air tool. Push-button Piezo ignition. 25 to 75 watts. Fast heat up for high productivity. Automatic cut-off switch when cap replaced. Gas capacity one hour continuous use. **Kit includes:** P2C iron with soldering tip, mini blow torch tip, hot knife tip, hot air tip and deflector, sponge and tray, storage case with toolholder and instructions.
No. 272SO278 .....**$60.80**
Iron only
No. 272SO279 .....**$38.27**

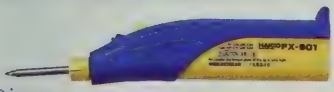
Tips

Single Flat
No. 272SO031 0.031" **$8.93**
No. 272SO093 0.093" **$8.93**
Double Flat
No. 272SO740 0.031" **$8.93**
No. 272SO741 0.093" **$8.93**

Weller portasol

Super Pro Portasol Kit

The patented soldering tool has a catalytic converter that provides a powerful, yet safe, flameless combustion. Easily interchangeable screw-in tips and accessories. Safety cut-off switch when cap is replaced. Refills with standard butane lighter fuel. Fast, flint-sparked, self-igniting ignition in high-strength plastic cap. Adjustable up to 125 watts of power, and operates up to two hours per refill. (Butane not supplied). (Ireland)
No. 272IR799 .....**$84.94**



HAKKO

FX-901 Cordless Soldering Iron

Lightweight and portable. Powered by four AA alkaline or Ni-MH batteries (not included), will operate above 600°F for up to 120 minutes. **Features:** Quick change composite tip; separate battery magazine for easy battery replacement; ~70 minutes Alkaline battery life, safety cap turns unit off and protects tip.
No. 821SO901.....**$29.97**

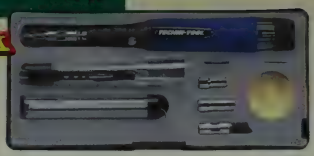
HAKKO

Hakko 808 Desoldering Gun

Built-in vacuum pump. No separate station required. Pump maintenance is quick and easy - simply remove the cover. Adjustable temperature control (380°C 480°C/715°F to 895°F).
Kit includes: Desoldering tool, solder tip, solder sock and case. (Japan)
No. 821SO881 .....**$210.57**

808 Optional Parts
No. 821SO3302 Iron holder **$20.77**
No. 821PA234 Heating element **$45.67**
No. 821AC042 Cleaning sponge **$3.37**

Best Seller



TECHNI-TOOL

Gas-powered Soldering Iron Kit

Use anytime, anywhere – no electric required! This manual ignition tool is safe for operation under any conditions. **Features:** 25W – 80W equivalent electrical power; ready to use 20 seconds after ignition; up to 120 minutes/fill. Includes Solderpro™ 70 iron; 1mm catalytic soldering tip; torch head for pinpoint flame; hot knife attachment; hot air blower; tip cleaning sponge; coil of tin/silver solder; heavy duty Ultra-Bo. 8.7" OAL (w/cap). Approx. temp. soldering tip 410° to 850°F. (Fuel not included). (Taiwan)

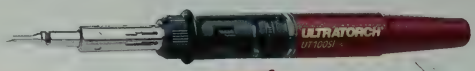
No. 758SO700 .....**$69.00**

TECHNI-TOOL

Flameless Heat Gun

Generates temperatures up to 1400°F, and features a wide nozzle and high-output catalyst for high-volume usage. Activate adhesives and potting compounds, preheat flux, install heat shrinkable and solder-filled terminals, handle countless other heating and drying applications. Cordless and completely portable, with infinitely adjustable heat levels. **Features:** instant-on piezo ignition; rapid heat-up; long-life catalyst; ergonomic grip; up to 120 minutes/fill. Included deflector attachment circulates heat and protects nearby work. 7.5" OAL. 20 ml gas container. (Taiwan)

No. 758SO950.....**$79.00**



MASTER

Best Seller

Ultratorch® Butane Heat Tool STD UT-100SI

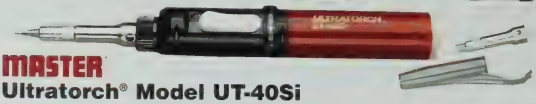
Self-igniting, combination portable soldering iron and flameless heat tool. Piezoelectric "push button" system–no matches or lighters necessary. Includes a soldering and heat tip, spanner wrench, open-end wrench, heat shrink attachment and protective cap. Heating temperatures: 200-500°C (392-932°F) when soldering, 700°C (1292°F) when shrinking. *(Butane Not Included)*

No. 542PR102 .....**$109.00**

Ultratorch® Model UT-100Si-TC Kit

UT-100Si-TC Kit contains: UT-100Si Ultratorch®, (3) Ultratip® soldering tips, hot air tip, heat shrink reflector, hot knife, wire cutter, needle nose pliers, coil of 60/40 solder, sponge and cap in plastic case.

No. 542SO105 .....**$179.00**



MASTER

Ultratorch® Model UT-40Si

Great entry-level cordless soldering iron/heat tool for soldering, rework and more. Self-igniting, refillable butane gas powered. Adjustable temperature/gas flow setting of up to 1,200°F with easy to use self-igniting slide switch. Includes protective cap, solder tip (approx. 840°F/450°C) and heat tip (approx. 1200°F/650°C). Operates up to 1.25 hours per refill. *(Butane not included)*

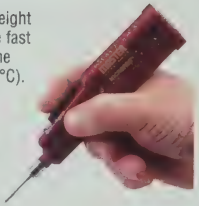
No. 542SO040.....**$53.00**

Ultratorch Kit – includes tool, solder tip, heat tip, hot knife tip, a shrink attachment, cap, sponge, stand, plastic case.

No. 542SO140 .....**$86.00**

MASTER

Micropro™ Portable Soldering Iron



Battery powered, portable soldering iron is lightweight and can solder up to 160 joints intermittently. The fast start-up reaches 361°F (183°C) in 10 seconds! The solder tip temperature reaches up to 1040°F (560°C). The thin profile reaches into confined areas and the removable safety cap locks slide switch and protects tip when in use. **Specs**: Approx. solder tip temp. 6W (max) 932°F (500°C); Max tip temp. approx.. 1040°F (560°C). **Includes:** Conical tip; Chisel tip; Tip wrench; 3 Alkaline batteries; Cap. ***One-Year Warranty.***

No. 542SO300 .....**$47.00**

MASTER

Microtorch® Model MT-51H

Combination torch and flameless heat tool. **Includes:** heat tip and 1" dia. shrink attachment. **Specs:** 2500°F torch and flameless heat up to 932°F; 2 hour average run time. *(Butane not included.)*

No. 542SO751 (MT-51H) (Shown).....**$40.00**

No. 542SO051 (MT-51) Torch Only **$25.00**

MASTER

Triggertorch™ Model MT-76

Versatile! Butane-powered, self-igniting trigger torch is also a soldering iron and flameless heat tool. **Features:** Adjustable flame up to 2500°F/1300°C, soldering up to 752°F/400°C, heat up to 932°F/500°C; hands-free slide lock for continuous use and instant off operation; 2 hour averge run time. *(Butane not included)*

No. 542SO076 .....**$45.00**

Triggertorch Kit – includes table top stand, solder tip, heat tip, hot knife tip, shrink attachment, polyfoam cutter, 5" wire cutter, 5" needle nose pliers, 60/40 solder and sponge in a durable plastic case.

No. 542SO176 (MT-76K) **$63.00**

WAHL® U.S.A.

ISO-Tip Power Pro Cordless Soldering Iron

Provides up to 30 minutes of continuous soldering. Solders 200+ electronic joints. Fully recharges in four hours. **Includes:** iron, charging stand, battery, hi-efficiency fine tip, hi-efficiency chisel tip. **(USA)**

No. 858IR904 .....**$72.70**

ISO-Tip Hi-Efficiency Replacement Tips

Heats up faster and gives you 20% more soldering time.

Tip	TT No.	Tip	Dia.	Description	PRICE
	858TI535	7535-100	5/32"	Regular Tip	$6.65
	858TI545	7545-100	1/16"	Fine Tip	$6.65
	858TI546	7546-100	3/16"	Heavy-Duty Tip	$6.65
	858TI566	7566-100	1/64"	Micro Tip	$6.65
	858TI577	7577-100	5/32"	Chisel Tip	$6.65
	858TI579	7579-100	3/32"	Beveled Tip	$6.65

FREE ESD and chemical audits – just call 800-832-4866!

PACE worldwide Arm-Evac Fume Extractors & Accessories

Unique portable unit for low-cost extraction!

Arm-Evac 50

Benchtop unit features adjustable airflow, quiet operation. Flow rate 152 m3/h max with plenum. Uses same accessories as Arm-Evac 250/200.

A. No. 612SO0050 (8880-0050) **$710.30**

Optional Arm Attachment
B. No. 612SO0055 (8886-0055) **$102.60**

The best protection from harmful fumes in its price range!

Arm-Evac 105

Portable, compact, easily placed on or under a workbench. Features a brushless motor and heavy-duty, 20-gauge steel housing. Uses same accessories as Arm-Evac 250/200. Flow rate: 220 m3/h.

Versatile, heavy-duty filtration for 1-4 workstations!

Best Seller

Arm-Evac 250/200

Microprocessor controlled with an easy-to read LED filter condition monitor that changes color when the filter needs to be changed. Unit increases pump speed as filter becomes loaded. Self-calibrates to specific arm configurations. Three-speed air flow adjustment, electronic air flow sensor. Flow rate 510 m3/h. **Includes:** Pre-filter, HEPA/gas combination filter and power cord.

Arm-Evac 200 (Not Shown) *Same features as Arm-Evac 250 without microprocessor controls.*

LEASING AVAILABLE!

JUST THE FACTS			
Model	**C. Arm-Evac 105**	**Arm-Evac 200**	**D. Arm-Evac 250**
Power Requirements:	115 VAC, 60 Hz	120VAC, 60 Hz 3 Amps 230VAC, 50 Hz 1.38 Amps	
Dimensions:	19.6"H x 11.5" W x 11.5" D	15.4" H x 11.1" W x 14.3" D	
Weight:	11.5 Kg (25.3 pounds)	13.75 Kg (30.25 lbs)	14 Kg (31 lbs)
Sound Level:	55 dBA	58 dBA	58 dBA
Number of Inlets:	Two 75 mm (3" Dia.)	Two 75mm (3" Dia.)	Two 75mm (3" Dia.)
Flow Rate: General Purpose Filter:	Single Inlet: 220 m3/h (130 cfm); Dual Inlet: 118 m3/h (70 cfm) per inlet	Single Inlet: 288 m3/h (170 cfm) Dual Inlet: 170 m3/h (100 cfm) per inlet	
Cleanroom Filter:	Single Inlet: 187 m3/h (110 cfm); Dual Inlet: 105 m3/h (62 cfm) per inlet	Single Inlet: 255 m3/h (150 cfm) Dual Inlet: 135 m3/h (80 cfm) per inlet	
# of Collection Accessories:	Two 65mm (2.5") or 75mm (3")	Four 45mm (1.75") or 50mm (2") or Two 75mm (3")	
Maximum Duct Run:	2.5m (8') per inlet	5m (16') per inlet	
System Options:	–	Silencer/Mobile Cart	
Standard Primary Filter:	General Purpose Filter		
Filtration Options:	General Purpose Filter, Cleanroom Filter, Adhesive Filter, Extended Life Filter, Economy Filter		
TT No.	**612SO011** (8888-0110)	**612PA1250** (8889-0205)	**612PA522** (8889-0255)
PRICE	**$650.20**	**$950.70**	**$1,305.90**

Arm-Evac 200/250 Silencer/Mobile Cart No. 612SO1225 (8884-1225).....**$477.30**

Accessories for Each Operator added to System					
Configuration	**TT No.**	**Pace Model**	**Description**	**Req. Qty/User**	**PRICE**
F	**612SO0765**	8886-0765	One 3" diameter ESD Safe Plastic Flex Arm and bench mounting bracket kit	1	**$180.80**
F	**612SO0750**	8886-0750	One 3" diameter ESD Safe Plastic Flex Arm	1	**$122.80**
G	**612AC366**	8886-0366	One metal plenum, ESD safe flex hose	1	**$275.80**

PACE worldwide

Replacement Filters – Arm-Evac 105, 200, 250

Pre-filter, 5/pk.
No. 612AC011 .....**$95.20**

High Capacity Pre-filter, 10/pk.
No. 612PA456 .....**$227.80**

HEPA/Gas Filter, ea.
No. 612AC093 .....**$217.90**

Cleanroom Filter, ea.
No. 612PA0921 .....**$322.90**

High Capacity Filter, ea.
No. 612PA936 .....**$271.10**

Adhesive Filter, ea.
No. 612PA0951 .....**$310.30**

Please Call for Arm-Evac 50 filters!

Weller®

Zero-Smog® Volume Extraction System

Volume extraction for up to two operators. Filter system contains an F5 fine dust, H12 HEPA and carbon filters guaranteeing a filtration efficiency of 99.5%. Powerful brushless and maintenance free turbine extracts at a volume capacity of 220m3/h with less than 55 dBA noise emission.

WFE 2ES Kit for One Operator

Includes: extraction unit; 39" extraction arm; 2" diameter extraction hose, 10' length; bench mounting bracket with damper for extraction arm, adapter and (2) 2"-2-3/4" hose clamps. 115VAC.
No. 272SO6511 .....$833.28

Accessory Kit for Second Operator

Contains: 39" extraction arm with funnel nozzle; 2" diameter extraction hose, 10' length; bench mounting bracket with damper for extraction arm; system seal and adapter, and (2) 2"-2-3/4" hose clamps.
No. 272SO6580 .....$205.36

Zero-Smog® Parts, Accessories & Filters

Fume Extraction Base Unit only (no accessories)
No.272SO6510 .....$655.87

Extraction Arm w/funnel nozzle - ESD safe
No. 272SO6592 .....$96.77

Extraction Arm w/flat nozzle - ESD safe
No. 272SO6593.....$96.77

Extraction Arm w/round nozzle - ESD safe
No. 272SO6594.....$96.77

Exhaust Hood (9.5" x 4") with 39.4" hose - ESD safe
No. 272SO6587.....$141.92

Extraction Plate (12" x 8.3") with 39.4" hose - ESD safe
No. 272SO6588.....$177.41

Metal Exhaust Hood (8" x 4")
No. 272SO6585.....$141.92

F5 Fine Dust Replacement Filter - removes 40-60% of particles >100µm. 10/Pk
No. 272SO6574.....$40.32

F7 Fine Dust Replacement Filter - removes 80-90% of particles > 10µm. 10/Pk
No. 272SO6575.....$64.51

Filter Cartridge w/H12 HEPA filter plus a wide band gas filter
No. 272SO6571.....$80.64

Filter Cartridge w/H13 HEPA filter plus a wide band gas filter
No. 272SO6573.....$354.82

Bench Mounting Bracket for system seal
No. 272SO6597.....$35.49

Hose Clamps for securing 2" hose. 2/Pk
No. 272SO6598.....$9.68

HAKKO HJ3100 Fume Extraction System - 170 CFM

The Hakko HJ Series is the most efficient and cost-effective fume extraction system available with a proven multi-stage filtering process to remove air contaminants as small as 0.01 micron. Direct connection of intake ports to tip extractors provides nearly 100% fume extraction right at the source. It's light, 18-pound weight makes it ideal for portable workstations or permanent two station setups. 11" x 9" x 18". (Japan)
No. 821SO310 .....$583.17

HJ3100 Nozzle Kits

Round nozzle kit – includes 3' - 2.5" articulated hose; 2.5" to 3" adapter; bench clamp with 3" coupler; 3.5" hose clamp (2 pack); 3" neoprene ESD duct, 6'.
A. No. 821SO2051 .....$131.97

Rectangular nozzle kit – includes 3' - 2.5" articulated hose; 2.5" to 3" adapter; bench clamp with 3" coupler; 3.5" hose clamp (2 pk); 3" neoprene ESD duct, 6'.
B. No. 821SO2052 .....$131.97

HJ3100 Silencer

Reduces noise by an average of 8dBA across the audible frequency band.
No. 821SO9992 .....$75.27

Benchtop Fume Extractors

METCAL

BVX-100 Fume Extraction System

The BVX-100 is a bench top, fume extraction system designed for portability and performance. No installation required, small footprint, low operating noise and superior airflow make this the ideal product for your fume extraction needs. Simply place the system on your bench top and turn it on. Harmful fumes and vapors are immediately removed from your operator's breathing zone. The base of the BVX-100 is a 300mm plenum that can also transform into an arm extraction system for additional range. Two filtration levels are offered. For clean room quality filtration, a 99.997% efficient HEPA filter is available. For light duty organic solvent and adhesive applications, a deep bed carbon filter is available. **Specs:** Static pressure: 1250 Pa (5 in H20); Flow rates: 85 m3/hr (50 CFM) w/HEPA filter; Noise level: <55 dbA; Size: 11.5"H x 12"W x 9"D; Voltage: 90 - 264 VAC; Frequency: 47 - 440 Hz; Power: 85 Watts. **(USA)**

Pre-HEPA-gas, 100-240VAC
No. 551PR102 .....**$495.00**
Pre-gas, 100-240VAC
No. 551PR103 .....**$495.00**
Main (combined HEPA/gas) filter
No. 551AC223.....**$77.25**

Pre filter (packs of 5)
No. 551AC224.....**$25.70**
Under bench mounting bracket
No. 551AC227.....**$82.00**

METCAL

Highest suction offered in a portable system!

BVX-200 Fume Extraction System

Strong, quiet and small enough to go anywhere. Just plug it in for a maximum free-blowing airflow rated at 250m³/h with maximum suction force at 850Pa. No separate compressor or external ducting needed. Uses both pre- and main filters with HEPA efficiency of more than 99.5% and an activated carbon filter.

Filter unit with two flexible arms, 4' long, Pre/HEPA/Gas
No. 551SO5200 .....**$725.00**
Filter unit for two stations, Pre/HEPA/Gas
No. 551SO5201 .....**$598.00**
Filter unit for two stations, Pre/Deep Bed Gas
No. 551SO5203 .....**$670.00**
One BVX arm 2' long with 6' long hose and table bracket
No. 551SO5211 .....**$135.00**

Pre-filter, 5/pk.
No. 551SO5221 .....**$49.00**
Main filter, HEPA 99.95%/Carbon
No. 551SO5223 .....**$89.00**
Flexible exhaust arm, Ø 2" and 4' long, ESD safe
No. 551SO5327 .....**$78.00**
Table bracket with 2 C-clamps
No. 551SO5331 .....**$42.00**
Connection hose, Ø 2" x 6' long
No. 551SO5333 .....**$42.00**

Fume Extraction Systems

EDSYN

A complete fume extraction solution for two operators!

FX225 Fume Extraction System

Not only removes visible fumes and dust but also unpleasant odors! HEPA filtration 99.997% effective to 0.3 microns with gas filtration included. Compact unit fits easily under almost any bench. Other convenient features include filter change indicator light, thermal trip circuit, maintenance-free brushless motor and low noise. Airflow: 130 cfm. **Includes:** Extractor, (2) 50mm arms with nozzles and hepa filter.

No. 330SO225 .....**$771.75**
No. 330SO2501 Pre-filter, 5/pk. **$31.60**
No. 330SO2502 Hepa filter **$298.35**
No. 330SO2503 Combined HEPA/GAS filter **$298.35**

EDSYN

A complete fume extraction solution for four operators!

FX300 Fuminator™ Fume Extraction System

Provides an efficient and cost effective solution to almost any volume fume extraction problem. **Features:** Quiet operation; Small footprint; Portable; Easy filter change; Quick and easy set-up. Provides filtration for 4 operators. ***Three-Year Warranty.***

Includes: Extractor (FX300) & four-operator Conversion kit (FXI300-4F) with funnel attachments.
No. 330SO5300 .....**$1,452.57**

Fuminator with Pre-Filter and Pleated Main Filter
No. 330SO300 .....**$833.35**

4 Operator Conversion Kit
Contains: (1) lid with 50mm inlets, (4) table brackets, (4) balancing valves and 10m of 50mm flex hose.(Attachment arms sold separately)
No. 330SO304.....**$471.21**

XF300 Replacement Filter Set
Pre-filter and pleated main filter with 95% filtration to 0.5 microns
No. 330AC300 .....**$102.57**

50mm ESD Safe Arm with Nozzle
A. No. 330SO5015 FXS5015.....**$111.10**

50mm ESD Safe Arm with Funnel
B. No. 330SO5016 FXS5016.....**$104.55**

50mm ESD Safe Arm with Fan Nozzle
C. No. 330SO5017 FXS5017.....**$136.00**

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.
We reserve the right to correct misprints.

Fume Absorbers & Extractors

HAKKO

A. Smoke Absorber

Best Seller

Soldering smoke contains salicylic acid, pinene and noxious components that if inhaled can result in headaches, nausea, eye diseases, etc. Absorbs 80% of these noxious components with a special filter with refined activated carbon and a high efficiency fan. A compact, self-standing unit that can be adjusted to any angle for maximum smoke absorption. Power: 14W, Absorption cap: 37.79 cu/ft. per min. (Japan)

No. 821PR491 110V **$110.67**

Five carbon filters
No. 821PR4491 .....**$23.47**

B. Optional parts: Arm stand with clamp.
No. 821AC023 15.7"L x 12"H **$148.17**

PACE worldwide

FX 50 Benchtop Fume Exhauster

The FX 50 fume exhauster is designed to remove solder flux fumes and other workplace fumes from the operator's breathing zone. Harmful fumes are drawn through an activated carbon impregnated foam filter. The air is filtered, cleaned and returned to the workplace. **Features:** high air flow fan (with filter: 1m³/min. - 35CFM); simple filter changeout; easy swivel action; three height adjustments. 115 VAC, 50/60 Hz, 17W.

FX 50 Benchtop Exhauster
No. 612SO920 .....**$114.50**

Replacement Filter - 5pk
No. 612PA0200 .....**$30.20**

EDSYN

Filters 8 times better than stationary filters!

Best Seller

Bench Top Fume Extractor Fan

The FXF11 Fuminator delivers optimum filtering capability at the fume source with its high-efficiency, two-stage charcoal-impregnated filtration system. The powerful 12V fan motor draws fumes away from you, not toward you. Adjustable to almost any working angle. 5-1/2"W x 12"H x 5-1/2"D. **(USA)**

Features:
- ESD safe
- Quick Filter replacement
- Ultra-quiet operation
- Front and rear LEDs indicate power & air flow direction
- Rotating front filter
- Internal safety grills

No. 330ED011.....**$59.95**

Accessories:

Filter Set: One Primary Rotational Filter, One Charcoal Impregnated Stationary Filter
No. 330SO001 .....**$10.65**

Primary Rotational Filter (Set of 5)
No. 330AC002 .....**$25.85**

Charcoal Impregnated Stationary Filter (Set of 5)
No. 330AC003 .....**$25.85**

ok

Benchtop Fume Absorbers

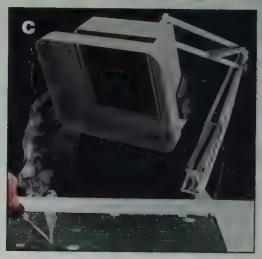
Aerodynamic hood design effectively draws irritating soldering fumes away from your work area. Carbon-impregnated filters trap a limited portion of the flux fumes. The compact size, low profile and adjustable stand allows convenient placement 6" to 8" (152 to 203mm) from work area. **Specs:** Input voltage: 115V/230 AC, 50/60 Hz; Maximum air volume: 105 to 126 CFM and activated carbon wt.: 12g. Includes 3 filters.

Benchtop fume absorber, 115 VAC
A. No. 606PR115 .....**$118.60**

ESD-safe benchtop fume absorber, 115 VAC
B. No. 606PR8115 .....**$135.00**

Fume absorber with articulating arm, 115 VAC
C. No. 551PR090 .....**$267.75**

Replacement filter set, 3/Pk. - (Not shown)
No. 606PA010 .....**$19.98**



Weller

Best Seller

WSA350 Fume Extractor

Removes flux fumes from soldering area. Ideal for workspaces using more active lead-free solder fluxes. Fumes absorbed by carbon activated filter. The stand allows the extractor to be adjusted to varying angles. Low noise fan. **Includes:** Carbon activated filter.
No. 272SO350 .....**$53.76**

Replacement filters, 3/Pk.
No. 272SO352 .....**$5.65**

Zephyrtronics™

ZT-4 Air Plus Fume Extractor

This compact, personal air cleaning system is powerful enough to effectively filter such occupational pollutants and health hazards as smoke, chemicals, airborne dust, fumes, and obnoxious odors. Activated carbon filtration traps over 80% particulant matter while the powerful extraction fan draws smoke and fumes away from your personal breathing space. Completely ESD safe, it also has an ESD wrist strap receptacle. **Specs:** Air Supply: long life, internal fan; Filtration: Activated carbon. 6-3/8"W x 8-1/4"H x 6"D.
No. 901SO004 120VAC / 60Hz **$185.00**

PCB Racks

Fancort Industries Rack-All Racks

A. RA-14 – for boards that require a large full slot. 25 slots.
No. 358ST164 ESD, heat resistant to 350°.....**$34.00**
No. 358ST163 Non-ESD **$49.00**

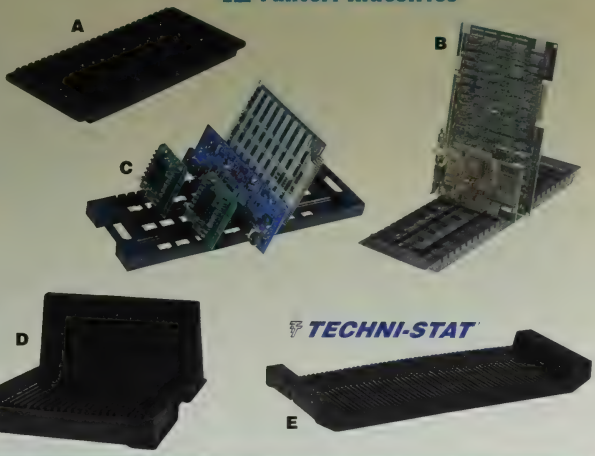
B. RA-18 – 6" x 18", 25 slots with parallel sides for more rigid holding.
No. 358ST018 Standard conductive 185°.....**$15.40**
No. 358CA118 High temp conductive 275° **$30.00**
No. 358ST180 Very high temp 350°.....**$40.00**
No. 358PR181 Permanently static dissipative cleanroom material **$22.00**

C. RA-20 – 7" x 20", 20 slots
No. 358ST020 Standard black conductive **$19.00**
No. 358SO220 Green static dissipative.....**$22.00**
No. 358PR035 Red non-ESD **$14.00**

C. RA-24 – 8-3/8" x 23", 20 slots, heavy duty
No. 358ST224 Tolerates 185°.....**$23.00**

D. PCBH Angle Rack – holds boards on two edges, 25 slots.
No. 358ST160 14" x 10" x 5" **$20.00**
No. 358ST100 10" x 8" x 4" **$16.00**

Fancort Industries



Techni-Stat Conductive PCB Rack

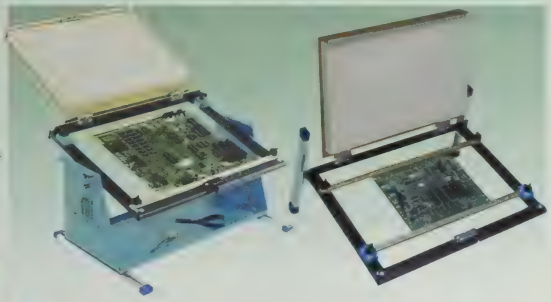
Heavy duty, rugged construction. 25 easy-to-load 3mm slots, 8mm slot depth. Convenient handles for moving rack.
E. No. 758ST1925 .....**$18.44**

PCB Board Cradles

TECHNI-TOOL

Adjustable PCB Bench Support

Adjustable repair stand for rework operations. Board rotates 360°. Fits all workbenches. Maximum board length: 9-3/4" (250mm).
No. 758SO017 .....**$103.84**

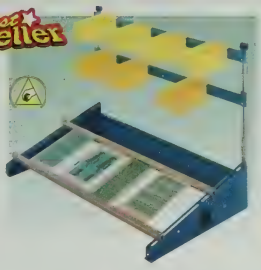


Fancort Industries

Best Seller

Combo-Slide

Adjustable ESD rails hold boards up to 18". Durable steel construction for stability. Multiple units connect easily to create production lines. Optional parts rack.



Combo-Slide with 2-36" PCB slide rails, no bin rack
No. 358ST036 .....**$180.00**
36" parts bin rack, 2 stringers
No. 358PR362 .....**$74.00**
Combo-Slide with 2-48" fixture slide rails, no bin rack
No. 358PR048 .....**$193.33**
48" parts bin rack, 2 stringers
No. 358ST048 .....**$80.00**

Fancort Industries

Standard and Low-Profile Flip-Racks

Standard racks feature 360° rotating frame with spring-loaded locks; 15° and 45° fixture angle settings; heavy steel base for stability, and antistatic foam to hold components in place during back side processing. Low-profile racks come with two legs instead of base, and require manual turning for backside work. Both handle boards up to .150" thick.

TT No.	Standard Rack	Low-Profile Rack	1 Board Max. Capacity	2 Boards Max. Capacity	PRICE
358PR699	X		8-1/2" x 17"	3.5" x 17"	$540.00
358PR889		X			$336.00
358ST012	X		11-3/4" x 18-8/9"		$568.00
358PR012		X		5-2/5" x 18-8/9"	$356.00
358PR017	X		17-1/2" x 21"		$608.00
358PR150		X		8" x 21"	$384.00

Service table

Fancort Industries

Fancort ESD Service Table

Versatile turning disc table is ideal for working with heavy or awkward objects. Conductive rubber surface with resistivity of 5 x 106Ω.
No. 358PR300 12" W x 1/2" H **$100.00**
No. 358PR380 15" W x 1/2" H **$114.00**
No. 358PR500 20" W x 5/8" H **$182.00**

FREE STATIC CONTROL AND CHEMICAL AUDITS
Call 800-832-4866 today!

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.
We reserve the right to correct misprints.

YOUR ONE-STOP SOURCE FOR KESTER SOLDER PASTE!

kester

Solder Paste

From wire and bar to paste and fluxes, no one offers more quality Kester products than Techni-Tool. Call today and let us tailor the right solution for your solder needs.

RoHS Compliant

500g Jar

Lead-Free 500g Jar

Lead-Free 600g Cartridge

600g Cartridge

Dispensing Syringes

Solder Paste for Stencil Printing Applications

Formula Type	Easy Profile® 256HA No-Clean		Easy Profile® 256 No-Clean		HydroMark 531 Water-Soluble		R562 Water-Soluble	
Alloy	Sn63Pb37		Sn63Pb37		Sn63Pb37		Sn63Pb37	
Product Characteristics	Designed to provide maximum print characteristics and solderability. For applications requiring the ultimate activity for difficult to solder components and board surface metallizations. High activity on all substrates, including OSPs. Excellent printing characteristics to 0.4mm (16 mil) pitch. High print speeds to 150 mm/sec (6"/sec)		Standard no-clean paste for a wide variety of reflow profiles and printing conditions. Industry standard formula performs well in a variety of applications. Compatible with enclosed print head systems. Best Seller		An all-purpose water-soluble paste. Provides consistent hours of stable stencil life, tack time, and printing characteristics. The improved anti-slump characteristics and excellent solderability to a wide range of surface and component lead metallizations solves problems caused by slumping, bridging, and wetting.		Organic acid, water-soluble solder paste designed to resist drying out in low humidity or slumping in high humidity. Maintains its print characteristics, tack and activity.	
Residue Removal	Not normally required.		Not normally required.		Use de-ionized or soft tap water at 120-140°F.		Use de-ionized or soft tap water at 120-140°F.	
Expected Tack Life	8+ hours		8+ hours		8+ hours		8+ hours	
Package	500g Jar	600g Cartridge	500g Jar	600g Cartridge	500g Jar	600g Cartridge	500g Jar	600g Cartridge
TT No.	**488SO2566**	**488SO2567**	**488SO256**	**488SO813**	**488SO905**	**488SO935**	**488SO9057**	**488SO3157**
PRICE	**$46.50**	**$55.80**	**$46.50**	**$55.80**	**$46.50**	**$55.80**	**$46.50**	**$55.80**

Lead-Free Solder Paste for Stencil Printing Applications

RoHS Compliant

Formula Type	EnviroMark™ 907 No-Clean	EnviroMark™ 828 Water Soluble New!	EnviroMark™ 808 Water Soluble	R520A Water Soluble
Alloy	Sn96.5Ag3.0Cu0.5	Sn96.5Ag3.0Cu0.5	Sn96.5Ag3.0Cu0.5	Sn96.5Ag3.0Cu0.5
Product Characteristics	Air and nitrogen reflowable no-clean solder paste specifically designed for the thermal requirements of lead-free alloys. Paste flux allows joint appearances that closely resemble that achieved with leaded alloys. High print speeds up to 6"/s (150 mm/s). Excellent printing characteristics to 16 and 20 mils pitch. Excellent print and reflow for 0201 applications.	Water soluble solder paste formulated to reduce voiding and provides excellent wetting and ease-of-cleaning. Extremely stable in the stencil printing process regardless of print speed, idle time and throughput. Excellent wetting on a variety of metallizations. Print speed up to 6"/sec (150 mm/sec). Capable of breaks in printing of up to 60 minutes without any kneading.	Robust printing characteristics result in consistent solder paste volume regardless of idle time, stencil life and print speed. Very aggressive and provides superior wetting to OSP coated and immersion silver boards. Capable of 60+ minute idle times in printing. Excellent anti-slump characteristics minimizing bridging defects. Print speeds up to 150 mm/s (6"/s). Excellent solderability to a wide variety of metallizations including Palladium. Compatible with enclosed print head systems.	Combines long stencil life and tack time with exceptional solderability to a wide variety of metallic substrates. Formulated to release consistently from the stencil for critical fine pitch applications. Extremely aggressive activator, providing superior wetting to OSP coated and immersion gold over electroless nickel boards. Print speed up to 150 mm/s (6"/s). Reduces scrap due to less paste dry out.
Residue Removal	Not normally required	Hot DI water	Hot DI water	Hot DI water
Expected Tack Life	12 hours	8 hours	8 hours	8 hours
Package	500g Jar	500g Jar	500g Jar	500g Jar
TT No.	**488SO3309**	**488SO3208**	**488SO8085**	**488SO2550**
PRICE	**$61.50**	**$61.50**	**$61.50**	**$61.50**

Solder Paste for Syringe Dispensing Applications

Formula Type	R276 No-Clean	R500 Water-Soluble
Alloy	Sn63Pb37	Sn63Pb37
Product Characteristics	Provides optimal performance in all types of dispensing applications. Packaged void-free to ensure consistent dispensing in high speed automated processes. Exhibits excellent dispensing characteristics with a wide range of needle diameters.	The activator package in this formula is aggressive enough to remove tenacious oxide layers or solder to OSP coated boards. R500 delivers excellent wetting characteristics.
Residue Removal	Not normally required.	Use de-ionized or soft tap water at 120-140°F.
Expected Tack Life	8+ hours	8+ hours
Package	35g Syringe	35g Syringe
TT No.	**488SO540**	**488SO5603**
PRICE	**$13.13**	**$13.13**

TECHSPRAY RoHS Compliant

SMT Stencil Cleaners

For removing all types of solder paste and uncured adhesives from screens, boards and equipment. Powerful enough for both wet and dry paste.

1692 – Features a proprietary non-hazardous water-based formula. Ideal replacement for IPA cleaners.
No. 754CH6926 1 Gallon **$67.45**
No. 754CH6924 1 Pint **$15.16**
No. 754CH6922 100 Wipes.....**$25.25**

1608 – Presaturated wipes with 70%+ pure, anhydrous isopropanol and deionized water for all-purpose cleaning. Lint free. Evaporates quickly. **100 Wipes**
No. 754CH081 Pop-up Dispenser.....**$19.89**
No. 754CH083 Box.....**$19.74**

JNJ

SMT Stencil Cleaner

CFC- and HCFC-free solvent removes RMA, RA, no-clean solder pastes and fluxes, UV curable inks and adhesives. Won't harm fiducials and most plastics. Odorless and fast drying with zero residue for both manual and automatic cleaning. Presaturated wipes are made of absorbent 100% polyester and leave little lint.

1 pint trigger SmartSpray® bottle
No. 501CH006.....**$12.00**
1 gallon container
No. 501CH601.....**$35.00**

100 wipe canister
No. 501AC100.....**$20.00**

JNJ

Isopropyl Alcohol and DI Water

A universal cleaner and disinfectant with deionized water that removes most types of inks, pastes, light oils, and contaminants associated with soldering, fluxes, printing and most industrial cleaning applications.

1 pint trigger spray bottle
No. 501CH600 .....**$8.21**
1 gallon in high density polyethylene
No. 501CH111 .....**$21.50**

100 wipe canister (6" x 9" wipes)
No. 501CH0100 .....**$16.00**

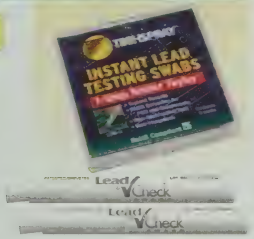
Lead Testing Kits

TECHSPRAY RoHS Compliant

Check for RoHS compliance!

Instant Lead Testing Swabs

LeadCheck swabs are a fast, easy-to-use method for testing components and solder joints for lead solder. Ideal for incoming components and boards, as well as existing inventories. One step with instant results. Non-hazardous. 8/pk.
No. 754SO515 (2515-N) **$26.53**



TECHNI-TOOL

Isopropyl Alcohol

A general purpose cleaner used in many hand-cleaning situations. Surprisingly strong cleaner when compared to competing brands. Easily removes light oils, grease, fingerprints, and the organic and ionic contamination found in fluxes. Mild enough for electronic and mechanical assemblies, stencils, ceramics, glass and plastics. Meets many military specs, including MIL-STD-2000 and WS-6536. Residue-free, rinsing not required. 16 fl. oz. bottle.
No. 758CH775.....**$5.55**

TECHSPRAY

Technical Grade IPA

99.8% pure anhydrous (containing the least water possible) isopropyl alcohol is excellent for tape head cleaning, defluxing, stencil cleaning, and other light cleaning. Avoid "bargain" alcohols for critical electronics cleaning. Cheap alcohols contain much more water, which slows drying and can cause oxidation.

1610 Isopropyl Alcohol
50 Count Wipes
(Individually Wrapped)
No. 754CH050 .....**$21.58**
100 Count Wipes (Pop-Up)
No. 754CH100 .....**$22.31**

Pint
No. 754CH610 .....**$9.68**
Gallon (Bladder)
No. 754CH611 .....**$38.68**
Gallon (Bottle)
No. 754CH650 .....**$23.06**

Chemtronics

IPA Presaturated Wipe

General purpose presaturated wipe in convenient tub dispenser. Ultra pure mixture of 70% IPA and 30% deionized water. 6" X 9" wipes are strong, highly absorbent and withstand rigorous scrubbing. **100 wipes/tub.**
No. 237CH0100.....**$24.19**

MicroCare

Presaturated Wipes

All Micro Care wipes are available in sturdy, self-closing tubs which minimize evaporation and extends product life. Refills also available; they eliminate wasting perfectly good tubs and save money.

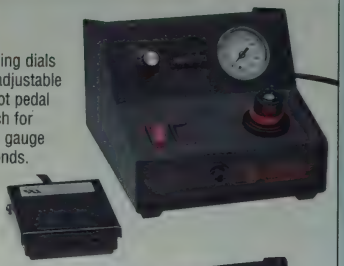
Micro Care Presaturated Wipes		
	Economy Wipes with MultiClean	Stencil Wipes with ProClean
Description	Economic, high-purity, lint-free polyester wipes presaturated with a water and alcohol solvents. Removes solder paste, flux residues, fingerprints, uncured epoxy residues and light oils and grease. Refillable tub.	ProClean & trade is a mild flux remover wipe that makes electronics circuit cleaning fast and easy. ProClean is an ultra-pure blend of water-free alcohol. Ideal for all types of electronics rework and repair. Is mil-spec approved for use on military electronics. No rinsing required and ozone-safe.
ESD-safe	X	X
Ozone-safe	X	X
Plastic-safe	X	X
No residues	X	X
Good toxicity ratings	X	
Mil-spec approved	X	X
TT No. 100/Tub	**565CH723**	**565CH019**
PRICE	**$18.90**	**$21.52**
Refill 100/Pk.	**565CH793**	**565CH099**
PRICE	**$15.23**	**$16.27**

Dispensing Systems

KAHNETICS

Best Seller

Economy Shot Meter



The Economy Shot meter is a benchtop unit with easy reading dials and adjustment of air pressure and vacuum. **Features:** an adjustable four-position push button timer switch with an electrical foot pedal actuator (optional finger switch available). Has a slide switch for easy change from 110 - 220 volts, 0-100 PSI regulator and gauge with locking ring, and time duration from .01 to 99.99 seconds. **Specs**: Size: 6-1/4"W x 7-3/4"D x 5"H; air input/output: 0 - 100 psi; vacuum: 0 - 18" of mercury; power: 110-230VAC switchable 50/60 Hz; Internal Voltage: 24V transformer; repeat accuracy: .5ms; recycle time: 12ms; setting accuracy: ±2%. (Requires shop air.) **(USA)**

No. 272ME810.....**$767.70**

KAHNETICS

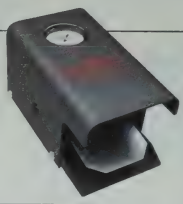
Deluxe Shot Meter

The Deluxe Shot Meter has digital timer control for reproducibility, and easy reading of dials and adjustments of air pressure and vacuum. **Includes:** an adjustable four position push button timer switch and vacuum feature to prevent dripping; an electrical foot pedal actuator; and (2) 0-100 PSI regulators with locking ring. Equipped with an accessory port for a vacuum pickup wand or for pressurizing an external cartridge or tank. **Specs**: Power: 110-230 VAC (switchable) 50/60 Hz; Internal Voltage: 24V transformer; Timer: Type: CMOS 8 bit microprocessor; Range: .01 to 99.99; Adjustments: four position, push-button switch; Repeat Accuracy: .5ms; Recycle Time: 12ms; Setting Accuracy: ±2%. (Requires shop air.) **(USA)**

No. 272ME824.....**$993.49**

KAHNETICS

Foot Valve



Save on table space and improve ergonomics with this foot valve for your dispensing needs. Runs on compressed air input, no electricity needed. 0-100 psi regulator and gauge. **(USA)**

No. 272PR806 (KDS806) **$252.67**

With drip-free vacuum assembly (0-18"Hg) (Not Shown)

No. 272PR808 (KDS806V) **$352.67**

OKI

700 System Premier Dispensing Components

Prevent chemical contamination while dispensing!

Silicone and chloride free to prevent chemical contamination while dispensing liquids and designed to work with a variety of workstations. Made of molded polypropylene, which is compatible with a wide range of adhesives,sealants, epoxies, pastes and lubricants. **(USA)**

Dispensing Guns

Ergonomically designed with durable two-piece construction, these guns are cost effective and reduce operator fatigue. Manually dispense a wide range of materials and viscosities by fitting luer lock barrel with a wiper piston onto a dispensing gun. The push button rod/plunge release and easy twist syringe mounting makes changing barrels quick and clean.

No. 756SO905 5cc.....**$69.00** **No. 756SO910** 10cc.....**$69.00** **No. 756SO930** 30cc.....**$69.00**

KAHNETICS

Deluxe Kit for Shot Meters/Foot Valves

Ideal when you don't know which size syringe is required or your requirements change. **Includes:** Four plastic adapter assemblies (3, 5, 10 & 30cc); Luer Lok™ and tapered syringes; Syringe tip caps; Needles (non-sterile, blunt) in stainless, Teflon and plastic tapered tip; Syringe stand; Material line filter; 2 oz. squeeze bottle; Industrial vinyl gloves; plastic box.

No. 272PR507 .....**$153.76**

Receiver Heads

KAHNETICS

Plastic Adapter Assemblies

Plastic syringe adapter with 6' air line (3/32" dia.) and fitting, plugs directly into shot meter. **(USA)**

No. 272AC503	3cc	**$20.77**
No. 272AC504	5 & 6cc	**$20.77**
No. 272AC505	10 & 12cc	**$22.58**
No. 272AC506	30 & 35cc	**$21.66**

OKI

700 System Premier

Receiver Head Assemblies

Transparent hose makes it easy to see possible backflow failure.

No. 756SO9031	3cc, 3 ft. Hose	**$17.92**
No. 756SO9051	5cc, 3 ft. Hose	**$17.92**
No. 756SO9101	10cc, 3 ft. Hose	**$17.92**
No. 756SO9351	30cc/55cc, 3 ft. Hose	**$17.92**
No. 756SO9352	30cc/55cc, 6 ft. Hose	**$18.99**

OKI

DX-250/350 Digital Dispenser

Accurately and consistently dispenses low, medium and high viscosity fluids. A highly responsive air pressure and vacuum management system coupled with a digital timing circuit provide consistent and repeatable dispensing and material waste control. User friendly software provides quick and easy setup. **Features:** Universal power supply with snap-on plug; Adjustable vacuum-driven suck back to control material tailing and waste; Small footprint; stackable. **Includes:** Universal power adapter; Foot switch, syringe stand, 10cc receiver head; Air hose with fittings; Hose holder and sample needles. ***One-Year Warranty.***

Model	DX-250 Basic Dispenser	DX-255 Basic Dispenser	DX-350 Precision Dispenser	DX-355 Precision Dispenser
TT No.	**756SO250**	**756SO255**	**756SO350**	**756SO355**
Programmable Memory Cycles	–	–	10	10
Pressure Range	0-100 psi	0-15 psi	0-100 psi	0-15 psi
Cycle Rate	600 cycles/minute		1200 cycles/minute	
Timing Range	0.020-60.000 seconds		0.008-60.000 seconds	
Cycles Mode	Timed, Purge		Timed, Interrupt, Teach, Purge	
PRICE	**$345.00**	**$345.00**	**$695.00**	**$695.00**

Manual Syringes

KANNETICS

Manual Unassembled Syringes

Unassembled and non-calibrated, includes barrel, rubber stopper and plunger rod. **(USA)**

Luer Lok Tips

No. 272SO1111 10CC Syringe, 15/pk **$8.77**

KANNETICS

Manual Assembled Calibrated Syringes

Includes graduated barrel, rubber stopper and plunger rod. **(USA)**

Luer Lok Tips

No. 272SO3330 3CC Syringe, 20/pk **$6.90**
No. 272PR255 5CC Syringe, 20/pk **$9.57**
No. 272PR441 10CC Syringe, 15/pk **$8.64**

Potting Syringes, Applicators and Needles

High-density, linear polyethylene applicators for hand operation only. Will resist highly reactive compounds & solvents. (369PR014 & 369PR016 supplied with stainless steel disposable needles.) **10/Pk.**

No. 369PR010 6cc Capacity
(1-10) **$5.30** (11-49) **$4.80** (50-250) **$4.25**
No. 369PR018 12cc Capacity
(1-10) **$7.00** (11-49) **$6.30** (50-250) **$5.60**
No. 369PR022 30cc Capacity
(1-10) **$8.35** (11-49) **$7.55** (50-250) **$6.70**

TECHNI-FACT

Did you know?

Techni-Tool was born in 1959

Along with:

- NASCAR driver Mark Martin
- Tennis champion John McEnroe
- NBC News anchor Brian Williams
- Basketball star Magic Johnson
- "American Idol" judge Simon Cowell
- Duchess of York Sarah Ferguson
- Chef Emeril Lagasse
- Actor Kevin Spacey

50 years 1959-2009

Air-Operated Syringes

KANNETICS

Air-operated Syringes

For micro-air dispensing. Unassembled and non-calibrated, includes barrel and rubber stopper. With Luer Lok tip. **(USA)**

No. 272PR516 3CC Syringe, 20/pk **$4.67**
No. 272PR517 5CC Syringe, 20/pk **$7.58**
No. 272PR518 10CC Syringe, 15/pk **$7.92**
No. 272PR519 30CC Syringe, 10/pk **$8.11**

700 Series Syringes

Techcon SYSTEMS

700 System Premier Luer Lock Barrels

Compatible with all luer lock fittings, dispensing tips, and luer lock-based workstations. Three barrel colors available: Natural; UV light block amber: blocks out UV and visible light up to 520nm; Carbon-free black barrel: prevents carbon contamination while providing maximum protection from UV and visible light. Color: Natural. **50/pk.**

Barrel Sizes
3cc: 2.96" (75.18mm) OAL
5cc: 3.05" (77.46mm) OAL
10cc: 3.58" (90.93mm) OAL
30cc: 4.66" (118.36mm) OAL

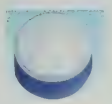
No. 756SO703 3cc **$16.05**
No. 756SO705 5cc **$17.12**
No. 756SO710 10cc **$18.00**
No. 756SO730 30cc **$25.68**

Natural

700 System Premier Accessories

Air Powered Pistons, Wiper Pistons - White UV Screen, 50/pk.

No. 756SO739 3cc **$6.85**
No. 756SO759 5cc **$9.20**
No. 756SO719 10cc.....**$12.84**
No. 756SO379 30cc.....**$21.40**



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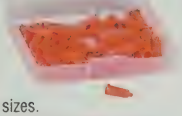
700 System Tip Cap



Use with 700 System Syringes to seal barrel between uses or to seal any valve. Fits all syringe sizes. Polypropylene. Tip cap double helix thread. **50/pk**

No. 756SO901 Orange **$6.96**
No. 756SO902 Black **$9.90**

Dispensing Tips

Techcon SYSTEMS

P Series Flexi - Dispensing Tips

These flexible polypropylene tubing tips are molded into high-density polypropylene luer lock hubs. The flexible tube is color coded to correspond with gauge size. The polypropylene tip prevents surface scratching. **50/Pk.**

TT No.	Hub	Gauge	I.D.	Length	PRICE
606TI155	Grey	15	0.054"	1-1/2"	$35.81
606TI650	Brown	16	0.047"	1-1/2"	$33.00
606TI185	Pink	18	0.033"	1-1/2"	$33.00
606TI205	Yellow	20	0.024"	1-1/2"	$33.00
606TI225	Black	22	0.012"	1-1/2"	$33.00
606TI255	Red	25	0.010"	1-1/2"	$34.32

Dispensing Tips

TT Series Tapered Dispensing Tips

Best Sellers

High-density polyethylene tips include a luer lock hub and a taper tip. Color coding indicates tip orifice inside gauge. Easily cut by user when shorter tip is required. 50/Pk.

14 gauge, 0.063" I.D., 1-1/4" L, Tan
No. 606TI170.....**$20.00**
16 gauge, 0.047" I.D., 1-1/4" L, Grey
No. 606TI171.....**$20.00**
18 gauge, 0.033" I.D., 1-1/4" L, Green
No. 606TI172.....**$20.00**
20 gauge, 0.024" I.D., 1-1/4" L, Pink
No. 606TI173.....**$20.00**
22 gauge, 0.016" I.D., 1-1/4" L, Blue
No. 606TI174.....**$20.00**

KANNETICS

Tapered Tip Needles

Taper reduces dripping from needle. Plastic material won't scratch delicate surfaces. **50/pk. (USA)**

14 gauge, 0.063" I.D., Salmon
No. 272PR232 .....**$14.93**
16 gauge, 0.048" I.D., Grey
No. 272PR233 .....**$14.93**
18 gauge, 0.034" I.D., Green
No. 272SO180 .....**$14.93**
20 gauge, 0.024" I.D., Pink
No. 272SO2022 .....**$14.93**
22 gauge, 0.017" I.D., Blue
No. 272SO2222 .....**$14.93**

KANNETICS

Stainless Steel Plastic Hub Dispensing Needles

JUST THE FACTS

TT No.	Gauge	I.D. (inch)	Length (inch)	Hub Color	PRICE
272PR812	18	0.038	1/2	Pink	$6.96
272PR180	18	0.038	1	Pink	$6.96
272PR283	19	0.032	1/2	Brown	$6.96
606TI189	19	0.032	1	Brown	$6.96
272PR249	20	0.026	1/2	Yellow	$6.96
272PR251	20	0.026	1	Yellow	$6.96
272PR021	21	0.023	1/2	Green	$6.96
272PR221	22	0.019	1/2	Black	$6.96
272PR252	22	0.019	1	Black	$6.96
272PR936	23	0.017	1/2	Light Blue	$6.96
272PR939	25	0.012	1/2	Blue	$6.96

All needles come 50/pk. **(USA)**

KANNETICS

Syringe Holder Stand

Compatible with all sizes of syringes and adapters. Keeps syringe upright to prevent accidental flow of material back up air line.
No. 272PR816 .....**$23.47**

PLATO Solder Pots

RoHS Compliant

General Purpose Solder Pots

Pots use a thermal timer switch with automatic voltage fluctuation correction for ± 11°F (6°C) temperature control. Infinitely variable temp. control. Safety heat shield. Removable dross tray for easy cleaning. **Input:** 120 VAC. 2 lb. cap.

TT No.	Plato #	Watts	Temperature Range	PRICE
A. 657SO101	SP-101	350	500° - 975°F (525°C)	$346.90
A. 657SO301	SP-301	500	500° - 1100°F (595°C)	$358.58

Precision Solder Pots

Control temperatures to ± 5°F (2.75°C). Solid-state controller limits transient voltage spiking. Preset temperature switch. LCD displays preset and operating temperatures. ESD safe. Safety heat shield, removable dross tray for easy cleaning; adjustable leveling feet. **Input:** 120VAC.

B.SP-500T: 2.5" diameter by 1.5" deep crucible; 2 lb. capacity.

TT No.	Plato #	Watts	Temperature Range	PRICE
B. 657SO500	SP-500T	350	Ambient to 925°F (496°C)	$1,189.04

C. SP-600T: large capacity 4" x 6" x 4" deep crucible; safety warm-up crucible cover; output jack for external temperature recorded or data logger. 32 lb. capacity.

C. 657SO600	SP-600T	1000	Ambient to 750°F (399°C)	$2,392.10

Porcelainized Crucibles

RoHS Compliant

*NEW
OPTIONAL PORCELAINIZED CRUCIBLES
• Reduces Cross Contamination
• Wipes Clean • Corrosion Resistant

Eliminates solder degradation due to metal absorption; resists activated fluxes and chemicals; wipes clean. **Input:** 120VAC.

TT No.	Plato #	Watts	Temperature Range	PRICE
A. 657SO1101	SP-101P	350	500° - 975°F (525°C)	$441.51
A. 657SO308	SP-301P	500	500° - 1100°F (595°C)	$460.20
B. 657SO501	SP-500TP	350	Ambient to 925°F (496°C)	$1,375.93
C. 657SO0600	SP-600TP	11000	Ambient to 750°F (399°C)	$2,695.79

657SO209

657SO003

Crucible replacements for lead or lead-free solder

2.5" diameter
No. 657SO003.....$99.25

4" diameter by 6" diameter
No. 657SO209.....$271.26

HAKKO

RoHS Compliant

FX-300 Series Soldering Pots

Soldering pots compatible with leaded and lead-free solder. **Features:** Temperature controllable; Ceramic heating element; Fast thermal recovery; Analog or digital temperature display; Easy pot replacement; Accommodates two different pots - 50mm (included) and 75mm square; Display reads degrees C or F. The digital model also features four different heating programs and a convenient timer for monitoring use. **Specs:** Temperature range: 400 - 840°F (200-450°C) with 50mm square pot, 400-720°F (200-380°C) with 75mm square pot option. **Includes:** Soldering pot; Hex wrench; J-shape collector; Spatula.

FX-300 Analog Soldering Pot
No. 821SO730 .....$299.97

FX-301B Digital Soldering Pot
No. 821SO731 .....$599.97

Long-life Aluminum Solder Pots

Special coating extends life up to 5 times longer than standard pots when using lead-free solder alloys.

Replacement 50mm long-life aluminum square pot
No. 821SO1539 .....$97.37

Replacement 75mm long-life aluminum square pot
No. 821SO1540 .....$104.27

HEXACON Mini-Pot

Used for stripping, tinning and soldering heat strippable wires. Entire assembly is grounded. 3 wire, grounded cords. Porcelain base, rubber non-skid mount – 110 V/60hz. **(USA)**

No. 432SO240	800°F	.....$85.43
No. 432SO947	700°F	.....$85.43
No. 432SO946	600°F	.....$85.43

American Beauty General Purpose Solder Pots

Center-tapped for dross skimmer or extra fixturing; 1-1/2" deep. Heats solder to 400°F in 15 min.; 850°F in 25 minutes. Adjustable, maintains contents at 350° to 850°F.

No. 138SO012 1 lb. $267.85
No. 138SO048 2-1/2 lbs.....$303.55

ESICO·TRITON INTERNATIONAL

ESICO Electric Soldering Pots

Supplied with three wire cord only. For tinning, stripping, dip soldering, etc. Available in 110/120V and 220/240V. Dross skimmers not included.

JUST THE FACTS								
	Model	110V Models TT No.	110V Models PRICE	Watts	Solder Cap-lbs	Max. Temp(°F)	Inside Diameter	Inside Depth
A*	12	352SO010	$112.32	200	3/4	750°	1-9/16"	1-1/2"
	12T	352SO022	$202.35	250	3/4	650°	1-9/16"	1-1/2"
B	20	352SO024	$284.22	250	1-1/4	1200°	2"	1-1/2"
C*	36	352SO032	$114.93	250	2-1/4	750°	2-1/2"	1-3/4"
	36C	352SO540	$137.32	250	2-1/4	900°	2-1/2"	1-3/4"
	36T	352SO042	$204.78	250	2-1/4	625°	2-1/2"	1-3/4"
	37T	352SO600	$252.15	650	5	650°	3-1/2"	1-3/4"
D	71T	352SO082	$315.25	1000	9-1/2	900°	3-1/8"	4-1/4"
E	75T	352SO094	$264.78	650	11-3/4	650°	4.75" x 4.75"	1-3/4"
F	80T	352SO100	$679.32	1200	33	650°	6" x 12"	1-7/8"
G	PD24	352SO240	$925.67	250	1-1/4	1100°	2"	1-1/2"
	PD33	352SO330	$945.60	350	4	850°	3" x 3"	1-1/2"
	PD74	352SO740	$1,192.80	1000	9-1/2	900°	3-1/8"	4-1/4"

A, C* = Pot size and control increases/decreases based on capacity.*

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Lead and Lead-Free Bar Solder

RoHS Compliant

Lead-Free

The Tin/Silver/Copper family of alloys has been selected as the primary alloy choice by many companies that have converted to lead-free assembly processes. This family of alloys is suitable for SMT, wave and hand soldering processes.

Ultrapure® K100LD

Developed as a low cost and low copper dissolution alternative to common lead-free alloys. Eutectic Tin/Copper alloy that controls the grain structure of the solder joint.

Ultrapure®

Manufactured by a special process that controls the inclusion of oxides, metallic and non-metallic impurities. Ideal for high tech electronic applications where lower surface tension and hole filling ability are essential.
Exceeds QQ-S-571-F, ASTM B32 and IPC/J-STD-006.

Ultra Low Dross

Manufactured with the Ultrapure® process. Formulated with a special low dross additive that dramatically reduces dross formation on the solder pot.

TT No.	Alloy	Bar Style	Unit of Measure	PRICE
Lead-Free Bar Solder				
488SO468	Sn96.5 Ag3 Cu0.5	Lead-Free	25 lb. Box (15 bars)	**$875.22**
488SO478	Sn96.5 Ag3 Cu0.5	Lead-Free	Each 1-2/3 lb. bar	**$62.24**
488SO525	K100LD	Ultrapure Lead-Free	25 lb. Box (15 bars)	**$552.83**
488SO521	K100LD	Ultrapure Lead-Free	Each 1-2/3 lb. bar	**$40.03**
Lead-Bearing Bar Solder				
488SO050	Sn63 Pb37	Ultrapure	25 lb. Box (15 bars)	**$312.64**
488SO500	Sn63 Pb37	Ultrapure	Each 1-2/3 lb. bar	**$22.24**
488SO046	Sn60 Pb40	Ultrapure	25 lb. Box (15 bars)	**$308.87**
488SO460	Sn60 Pb40	Ultrapure	Each 1-2/3 lb. bar	**$21.97**
488SO030	Sn63 Pb37	Ultra Low Dross	25 lb. Box (15 bars)	**$341.40**
488SO980	Sn63 Pb37	Ultra Low Dross	Each 1-2/3 lb. bar	**$24.28**

Kester pricing changes frequently due to fluctuation in the metals market. Please call for the latest prices.

Kester® Liquid Fluxes and Thinners

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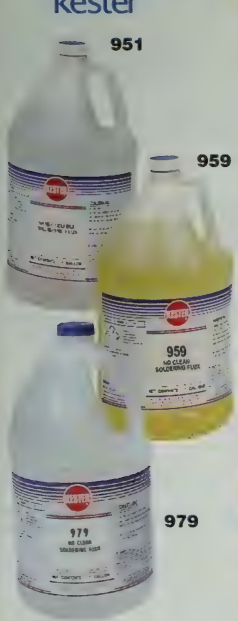


No-Clean Liquid Fluxes - Alcohol Based

RoHS Compliant

No-Clean Liquid Flux - Alcohol Based	951 (1 Gallon)	959 (1 Gallon)	985M (1 Gallon)	959T (1 Gallon)
Flux Type	Rosin Free Low Solids No-Clean	Low Solids No-Clean	Low Solids No-Clean New!	Low Solids No-Clean Liquid Flux
Lead-Free Solder	No	No	Yes	Yes
Percent Solids	2.0	3.9	3.6	2.9
VOCs (g/liter)	792	776	667	765
Specific Gravity	0.813 ± 0.003	0.800 ± 0.005	0.805	0.794 ± 0.005
Product Characteristics	Very low solids, rosin-free. Practically no residue. For spray or foam applications.	For wave soldering. Minimizes the formation of micro-solderballs. For spray or foam applications.	Non-corrosive, non-conductive tack-free residues. Suitable for leaded and lead-free alloys.	Contains very small percentage of rosins which improves solderability, heat stability and surface insulation.
Compliant Spec. (not normally	Bellcore Issue 1 GR-78-CORE & ANSI/J-STD-004, ORLO	Telecordia Issue 1 GR-78-CORE & IPC/J-STD-004, ORLO	Bellcore Issue 1 GR-78-CORE & ANSI/J-STD-004, ORLO	Bellcore Issue 1 GR-78-CORE & ANSI/J-STD-004, ORLO
Residue Removal Required	5768 Bio-Kleen saponifier 2% concentration	Hot de-ionized water at 140-160°F with 1% solution	5768 Bio Kleen saponifier Not required	5768 Bio Kleen saponifier Not required
TT No.	**488SO951**	**488SO959**	**488CH985**	**488SO259**
PRICE	**$35.28**	**$33.95**	**$76.78**	**$33.95**
Thinner	# 110 (1 Gallon)	4662-SM (1 Gallon)	4662-SM (1 Gallon)	4662-SM (1 Gallon)
TT No.	**488SO110**	**488SO662**	**488SO662**	**488SO662**
PRICE	**$30.96**	**$29.05**	**$29.05**	**$29.05**

Best Seller

No-Clean Liquid Fluxes - VOC Free

RoHS Compliant

No-Clean Liquid Flux - VOC Free	971M (1 Gallon)	979 (1 Gallon)
Flux Type	VOC-Free, No Clean	VOC-Free, No Clean
Use With Lead-Free Solder	No	Yes
Percent Solids	3.25%	4.5%
Specific Gravity	1.005 ± 0.010	1.016 ± 0.010
Product Characteristics	Designed for foam and wave soldering applications.	Most active VOC-Free for optimal top-side wetting and solderball reduction. Apply by spray or dip.
Compliant Specifications	Telcordia Issues 1 GR-78-CORE IPC/J-STD-004 Flux designator ORLO	Telcordia Issues 1 GR-78-CORE & IPC/J-STD-004 Flux designator ORLO
Residue Removal Method (not normally required)	Wash with de-ionized water at 140-160°F with 2% 5768 Bio-Kleen® saponifier	Wash with de-ionized water at 140-160°F with 2% 5768 Bio-Kleen® saponifier
TT No.	**488CH971**	**488CH0979**
PRICE	**$30.38**	**$27.56**

NEED TO BUY MORE THAN A GALLON?

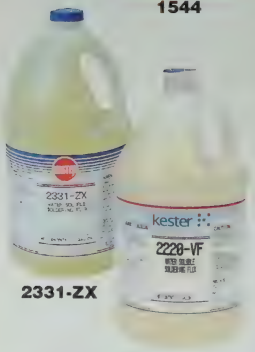
All liquid fluxes and thinners are available in 5 gallon and 53 gallon drums as well. Just call!

Kester® Liquid Fluxes and Thinners

kester

186-18

1544



2331-ZX

2220-VF

Rosin Based Liquid Fluxes

This is a high quality, purified grade rosin blended into an alcohol solvent system. The desired flux activity and the amount of rosin residue are determined by the concentration (solids percentage) of the flux.

Rosin Based Liquid Fluxes			
	186 (1 Gallon)	186-18 (1 Gallon)	1544 (1 Gallon)
Flux Type	—	—	Activated Rosin (AR)
Percent Solids	36%	18%	50%
Percent Halides	—	—	0.44%
Specific Gravity	0.879 ± 0.003	0.831 ± 0.005	0.929 ± 0.005
Product Characteristics	Designed for thermal stability and superior solderability.		For difficult solder surfaces
Compliant Spec	IPC/J-STD-004, ROLO		ANSI/J-STD-004 ROMI
Residue Removal Method	Non-corrosive residue may be removed w/solvent or #5768 Bio-Kleen saponifier at 7-10% solution in de-ionized water at 120-150°F.		Residue is non-corrosive, but may be removed with solvent.
TT No.	**488SO0186**	**488SO0186**	**488SO544**
PRICE	**$46.07**	**$61.34**	**$39.26**

Water-Soluble Liquid Fluxes - Alcohol Based

RoHS Compliant

Water-Soluble Liquid Flux - Alcohol Based				
	2331-ZX (1 Gallon)	2120 (1 Gallon)	2235 (1 Gallon)	2220-VF (1 Gallon)
Flux Type	Neutral pH, Organic Water-Soluble	Organic-Water Soluble	Organic-Water-Soluble	Organic-Water-Soluble
Lead-Free Solder	No	No	Yes	Yes
Percent Solids	33%	24%	11%	7%
VOCs (g/liter)	729	670	763	0
Specific Gravity	0.899 ± 0.005	0.862 ± 0.005	0.856 ± 0.005	1.060 ± 0.003
Percent Halides	2.2%	Halide-Free	1.6%	2.39%
Product Characteristics	Original pH neutral organic flux for automatic wave and drag soldering processes.	Highly active organic flux for automated wave soldering applications. Halide-free formula produces bright, shiny joints and high ionic cleanliness after water cleaning	Low solids flux designed to help reduce skips on bottom side of surface mount pads.	Thermally stable and VOC-free to allow for effective high temp soldering. Works with both leaded & lead-free wave soldering applications.
Compliant Spec.	IPC/J-STD-004, ORH1	IPC/J-STD-004 Flux designator ORHO	IPC/J-STD-004, ORH1	IPC/J-STD-004, ORH1
Residue Removal	Residue removal is required. Use de-ionized water at temp 120-150°F			Use de-ionized water at 120-140°F.
TT No.	**488SO2331**	**488CH2120**	**488CH2235**	**488CH620**
PRICE	**$34.78**	**$37.10**	**$38.26**	**$46.65**
Thinner #	**4662 (1 Gallon)**	**4662 (1 Gallon)**	**4662 (1 Gallon)**	**DI Water**
TT No.	**488SO466**	**488SO466**	**488SO466**	**–**
PRICE	**$28.47**	**$28.47**	**$28.47**	**–**

Flux Pens

kester

Kester Flux-Pen®

Dispense the right amount of liquid. For rework and soldering touch-up. **(USA)**

Formula 186-18 RoHS Compliant
Mildly Activated Rosin Flux
No. 488SO618.....**$3.85**

Formula 186
RMA Flux
No. 488CH0186.....**$3.85**

Formula 2331-ZX
Water Soluble Flux
No. 488CH450.....**$3.85**

Formula 959T RoHS Compliant
No-Clean, Low-Solids Flux
No. 488SO059.....**$3.85**

Formula 952-D6
No-Clean Flux
No. 488CH952.....**$3.85**

Formula 951
A Halide-Free, "No-Clean" Flux
No. 488CH051.....**$3.85**

Refillable Flux Dispenser Pens

BONKOTE™

This 7CC, low-cost flux pen provides you controlled application of flux without mess. It features a refillable flux applicator and replaceable felt tip and cartridge. Use with Non-Wash, Wash or Strong Acid Flux. **5/pk.** *(Flux not included.)*

No. 202PR012 Broad Spade Tip Pen.....**$71.80**
No. 202PR016 Large Fine Tip Pen.....**$108.00**

SmartWipes

JNJ

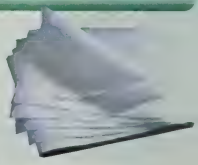
UltraClean SmartWipes

Made of 100% continuous filament polyester fiber with a knit construction and pattern. Extremely low particle generation and soluble extractables. Excellent for cleaning glass and ceramic substrates, CDs, screens, etc. because they won't scratch. Unaffected by solvents. Widely used for applications where lint-free cleaning is crucial. 9" x 9". **850/case.**
No. 501AC031 .....**$139.29**

JNJ

Class 100 cleanroom grade

UnderStencil SmartWipes



Especially for cleaning SMT stencils and screen/stencil printing machines. Effectively absorbs solder paste, flux residue, inks and epoxies, with or without solvent. Keeps stencil undersides clean from excess residue between prints to prevent solder paste contamination on PC boards. Ideal for cleaning standard, fine and ultra fine pitch stencil images, they resist tearing and shredding, and are very low in lint. 9" x 9". **300/bag.**
No. 501PR401 .....**$31.26**

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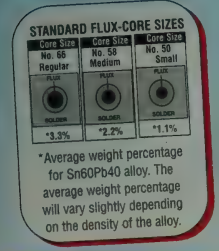
OVER 100 YEARS MANUFACTURING EXPERIENCE!



Activated rosin core with excellent wetting action. Industry standard for most electrical and electronic hand soldering

44 Rosin Cored Wire Solder

Specs: Formula Flux Type: "44" Rosin Core Activated Solder 1lb. spool; Product Characteristics: Activated rosin core with excellent wetting action. Industry standard for most electrical and electronic hand soldering; Compliant Specifications: *ANSI/J-STD-006 Flux designator ROM1;* Residue Removal Method: Not required for most applications. May be removed by solvent or Kester's Bio-Kleen saponifer; Use on: Platinum, Gold, Copper, Tin Solder, Palladium, Silver, Nickel, Cadmium, Brass, Lead, Bronze, Rhodium, Beryllium.

TT No.	Alloy	Diameter	Core Size	PRICE/ea.
488SO157	Sn63 Pb37	.015"	66	$28.38
488SO158	Sn63 Pb37	.020"	66	$21.15
488SO160	Sn63 Pb37	.025"	66	$18.29
488SO162	Sn63 Pb37	.031"	66	$18.06
488SO061	Sn63 Pb37	.062"	66	$17.66
488SO144	Sn60 Pb40	.025"	66	$18.09
488SO146	Sn60 Pb40	.031"	66	$16.40
488SO148	Sn60 Pb40	.040"	66	$15.95
488SO150	Sn60 Pb40	.050"	66	$17.03
488SO152	Sn60 Pb40	.062"	66	$15.95

Mildly activated rosin cored wire for sensitive medical device applications

285 RMA Flux Cored Wire Solder

Specs: Formula Flux Type: 285 Rosin Mildly Activated (RMA) Flux Cored Solder 1lb. spool; Compliant Specifications: *Bellcore Issue1 GR-78-CORE & ANSI/J-STD-006 Flux designator ROL1;* Residue Removal Method: Not required for most applications. May be removed by solvent or Kester's Bio-Kleen saponifer; Use on: Platinum, Gold, Copper, Tin Solder, Palladium, Silver.

TT No.	Alloy	Diameter	Core Size	PRICE/ea.
488SO9703	Sn63 Pb37	.015"	66	$30.08
488SO702	Sn63 Pb37	.020"	66	$23.93
488SO718	Sn63 Pb37	.025"	66	$21.09
488SO6310	Sn63 Pb37	.031"	66	$17.15

Performance similar to a mildly activated rosin core but leaves a visually cleaner appearance after soldering

245 No-Clean Rosin Cored Wire Solder

Specs: Formula Flux Type: 245 No-Clean Rosin Cored Solder 1lb. spool; Compliant Specifications: *Bellcore Issue1 GR-78-CORE & ANSI/J-STD-006 Flux designator ROL0;* Residue Removal Method: Not required for most applications. May be removed by solvent or Kester's Bio-Kleen saponifer; Use on: Platinum, Gold, Copper, Tin Solder, Palladium, Silver.

TT No.	Alloy	Diameter	Core Size	PRICE/ea.
488SO788	Sn63 Pb37	.015"	50	$28.37
488SO807	Sn63 Pb37	.020"	50	$20.46
488SO633	Sn63 Pb37	.020"	58	$18.56
488SO6309	Sn63 Pb37	.025"	50	$19.47
488SO800	Sn63 Pb37	.031"	50	$17.06
488SO6301	Sn63 Pb37	.031"	58	$19.26
488SO8803	Sn63 Pb37	.031"	66	$17.12

Kester pricing changes frequently due to fluctuation in the metals market. Please call for the latest prices.

Solder Wires for Lead-Free Assembly

Tested and proven to give good contact angles and shiny joints.

Enables lead-free soldering of most common metals. RoHS Compliant

48 Activated Rosin Flux Cored Wire Solder

Characteristics: Unparalleled wetting performance; Excellent solderability and fast wetting to a variety of surface finishes; Eliminates the need and expense of cleaning; Low smoke, odor and spattering; 1lb. Spool. **Compliant Specs:** IPC/J-STD-004 Flux designator ROL1.

TT No.	Alloy	Diameter	Core Size	PRICE/ea.
488SO1520	K100LD – A eutectic tin/copper alloy with controlled metallic dopants	.020"	66	$37.44
488SO1525		.025"	66	$27.80
488SO1531		.031"	66	$30.24
488SO1550		.050"	66	$24.47
488SO1562		.062"	66	$27.30
488SO7401	Sn96.5 Ag3 Cu0.5	.020"	66	$43.80
488SO7406	Sn96.5 Ag3 Cu0.5	.025"	66	$43.32
488SO7402	Sn96.5 Ag3 Cu0.5	.031"	66	$40.32
488SO7404	Sn96.5 Ag3 Cu0.5	.050"	66	$36.90
488SO7400	Sn96.5 Ag3 Cu0.5	.062"	66	$32.75

Provides superior wetting performance for hand soldering. RoHS Compliant

275 No Clean Flux Cored Wire Solder

Characteristics: Colorless translucent residues. Eliminates cleaning; Low smoke and odor. 1lb. Spool. **Compliant Specs:** Telcordia Issue 1 GR-78 CORE + IPC/J-STD-004 Flux designator ROL0.

TT No.	Alloy	Diameter	Core Size	PRICE/ea.
488SO1315	K100LD – A eutectic tin/copper alloy with controlled metallic dopants	.015"	66	$37.65
488SO1320		.020"	66	$34.80
488SO1325		.025"	66	$26.99
488SO1331		.031"	66	$27.00
488SO1350		.050"	66	$23.91
488SO1362		.062"	66	$24.03
488SO6808	Sn96.5 Ag3 Cu0.5	.015"	58	$46.92
488SO7863	Sn96.5 Ag3 Cu0.5	.020"	58	$44.01
488SO617	Sn96.5 Ag3 Cu0.5	.025"	58	$32.88
488SO7871	Sn96.5 Ag3 Cu0.5	.031"	58	$33.09
488SO7866	Sn96.5 Ag3 Cu0.5	.050"	58	$39.65
488SO7867	Sn96.5 Ag3 Cu0.5	.062"	58	$36.66

Water soluble formula more effective than rosin fluxes in soldering difficult metals. RoHS Compliant

331 Organic Flux Cored Wire Solder

More heat stable than most organic fluxes, minimizes smoke and odor. Unlike many competitive water-soluble flux formulations in that the residue is easily and completely removed with plain water. No neutralization, saponifiers or detergents are necessary to completely solubilize residue. Softened tap water or deionized water is recommended for high reliability. 1 lb spool. RoHS Compliant.

331 Cored Lead-Free Wire Solder RoHS Compliant

TT No.	Alloy	Diameter	Core Size	PRICE/ea.
488SO3215	K100LD – A eutectic tin/copper alloy with controlled metallic dopants	.015"	66	$37.64
488SO3220		.020"	66	$33.29
488SO3225		.025"	66	$30.68
488SO3231		.031"	66	$29.40
488SO3250		.050"	66	$23.91
488SO3262		.062"	66	$23.46
488SO7842	Sn96.5 Ag3 Cu0.5	.015"	66	$49.85
488SO7841	Sn96.5 Ag3 Cu0.5	.020"	66	$42.87
488SO7847	Sn96.5 Ag3 Cu0.5	.025"	66	$36.03
488SO7843	Sn96.5 Ag3 Cu0.5	.031"	66	$31.88
488SO7849	Sn96.5 Ag3 Cu0.5	.050"	66	$34.38
488SO7861	Sn96.5 Ag3 Cu0.5	.062"	66	$33.57

331 Cored Lead-Bearing Wire Solder

TT No.	Alloy	Diameter	Core Size	PRICE/ea.
488SO422	Sn63 Pb37	.015"	66	$31.83
488SO6401	Sn63 Pb37	.020"	66	$22.95
488SO417	Sn63 Pb37	.025"	66	$20.81
488SO6403	Sn63 Pb37	.031"	66	$17.67

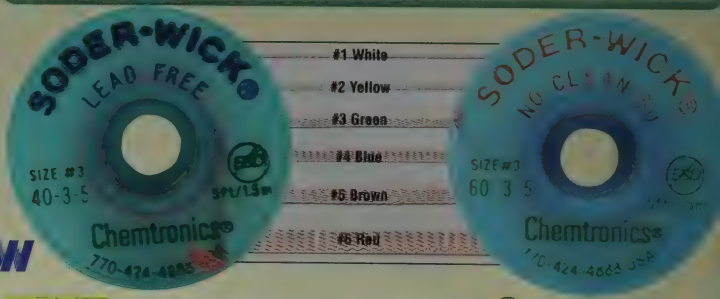
Chemtronics® Desoldering Braids

Chemtronics

Best Seller

Soder-Wick® Desoldering Braid

Significantly reduces rework/repair time and minimizes the risk of heat damage to your board. Its geometrically-precise weave design allows for maximum capillary action and solder capacity and optimizes heat transfer through the braid and into the solder joint. Minimal flux residue on the board speeds up the cleaning process or eliminates it entirely.



SW

Soder-Wick® Lead-Free SD

RoHS Compliant

Engineered for high temperature, lead-free solders. Transfers heat to joint more quickly and efficiently than conventional braids. Noncorrosive ultra-high-purity no-clean flux. RoHS compliant. ESD-safe static dissipative bobbins.

Size	Color	5'	PRICE	10'	PRICE	Application
1 - .030"	White	237SO491	$3.76	–	–	SMD, Micro-circuits
2 - .060"	Yellow	237SO492	$3.76	237SO412	$6.81	Small Pads, SMDs
3 - .080"	Green	237SO493	$3.98	237SO413	$7.21	Medium Pads
4 - .110"	Blue	237SO494	$4.44	237SO414	$7.88	Large Pads

Soder-Wick® Rosin SD

Non-corrosive, ultra-high purity Type R rosin flux in ESD-safe static dissipative bobbins.

Size	Color	5'	PRICE	10'	PRICE	Application
1 - .030"	White	728SO801	$3.44	728SO8011	$6.03	SMD, Micro-circuits
2 - .060"	Yellow	728SO802	$3.44	728SO8021	$6.03	Small pads, SMDs
3 - .080"	Green	728SO803	$3.70	728SO8031	$6.43	Medium Pads
4 - .110"	Blue	728SO804	$4.00	728SO8041	$7.10	Large Pads
5 - .145"	Brown	728SO805	$4.39	728SO8051	$7.92	Terminals
6 - .210"	Red	728SO806	$4.67	–	–	Large Lugs

Soder-Wick® No-Clean SD

Patented noncorrosive, halide free, organic no-clean flux. Desolders up to 40% faster than competitive no-clean braids, leaves boards cleaner. Meets Bellcore TR-NWT-000078 and ANSI IPC SF-818 for Surface Insulation Resistance, ANSI/IPC J STD-004, Type ROL0. ESD-safe static dissipative bobbins.

Size	Color	5'	PRICE	10'	PRICE	Application
1 - .030"	White	728SO601	$3.70	237SO611	$6.70	SMD, Micro-circuits
2 - .060"	Yellow	728SO602	$3.70	237SO210	$6.70	Small pads, SMDs
3 - .080"	Green	728SO603	$3.86	237SO631	$7.10	Medium Pads
4 - .110"	Blue	728SO604	$4.39	237SO641	$7.92	Large Pads
5 - .145"	Brown	728SO605	$4.81	237SO0610	$8.72	Terminals

Soder-Wick® Rosin

Non-corrosive, ultra-high purity Type R rosin flux.

Size	Color	25'	PRICE	Application
1 - .030"	White	237SO125	$14.99	SMD, Micro-circuits
2 - .060"	Yellow	237SO225	$14.99	Small pads, SMDs
3 - .080"	Green	237SO325	$15.39	Medium Pads
4 - .110"	Blue	237SO425	$17.02	Large Pads
5 - .145"	Brown	237SO525	$19.07	Terminals
6 - .210"	Red	237SO625	$20.26	Large Lugs

Chemtronics

Chem-Wik® Desoldering Braid

The standard desoldering braid for service and repair. Ultra-pure, oxygen-free copper braid quickly and completely removes solder from circuit boards and components. Its fast wicking action protects components from harmful heat damage. Meets MIL-F-14256F Type R, NASA STD-8739.3 Soldered Electrical Connections, ANSI/IPC J STD-004, Type ROL0

Chem-Wik® Rosin

Noncorrosive Type R rosin flux.

Size	Color	25'	PRICE	50'	PRICE	Application
.030"	Gray	237SO050	$13.29	237SO065	$26.30	Micro-circuits
.050"	Yellow	237SO062	$13.29	237SO066	$26.30	Small pads
.075"	Green	237SO074	$13.84	237SO078	$27.50	Medium Pads
.100"	Blue	237SO014	$14.76	237SO018	$29.60	Large Pads

Size	Color	100'	PRICE	500'	PRICE	Application
.030"	Gray	237SO020	$53.06	237SO024	$257.15	Micro-circuits
.050"	Yellow	237SO060	$53.06	237SO025	$257.15	Small pads
.075"	Green	237SO086	$55.03	237SO027	$267.34	Medium Pads
.100"	Blue	237SO012	$59.01	237SO029	$286.14	Large Pads

Chem-Wik® Rosin SD

Packaged in static dissipative bobbins. Noncorrosive Type R rosin flux.

Size	Color	5'	PRICE	Application
.030"	Gray	237SO052	$3.06	Micro-circuits
.050"	Yellow	237SO064	$3.06	Small pads
.075"	Green	237SO076	$3.21	Medium Pads
.100"	Blue	237SO016	$3.38	Large Pads

DESOLDERING BRAID SIZING GUIDE:

Too Small — 0
Perfect — 0
Too Big — 0

1. Choose a Desoldering braid width equal to or slightly larger than the pad or connection.
2. For leaded solder applications, choose a desoldering tip equal or slightly smaller than the pad or connection.
3. For lead-free applications, choose a desoldering tip equal to or slightly larger than the pad or connection.

Chemtronics

CircuitWorks® Lead-Free Pocket Solder

RoHS Compliant

The lead-free, high-purity pocket-sized solder dispenser for convenient rework and repair. Precision manufactured activated rosin-core SAC solder. Meets Spec: QQ-S-571E WRAP II. Type RMA flux. Ensures even, reliable solder connections; Cleans and wets heavily tarnished copper surfaces. RoHS compliant. 1.0mm (0.04") diameter, 3.18m (125") length.

No. 237SO200.....$18.36

TECHSPRAY

ProWick® Desoldering Braid - Anti-Static Bobbin

100% copper wick, coated with rosin type R flux. Flux coating provides dependable, long-lasting protection from oxidation. Braid weave pulls in and traps excess solder. Leaves no corrosive residues. Anti-static bobbin.

Size	Color	5'	PRICE	10'	PRICE
1 - .035"	White	754SO188	$2.77	754SO184	$5.00
2 - .055"	Yellow	754SO809	$2.77	754SO220	$5.03
3 - .075"	Green	754SO110	$2.84	754SO187	$5.11
4 - .098"	Blue	754SO111	$3.13	754SO197	$5.59
5 - .130"	Brown	754SO112	$3.57	754SO189	$6.51

No-Clean Wick Desoldering Braid

Removes up to four times more solder than conventional wick and extracts solder faster than Type R flux wicks. Residue is halide free and non-conductive and doesn't have to be cleaned off board.

Size	Color	5'	PRICE	10'	PRICE
1 - .035"	White	754SO145	$3.43	754SO190	$6.17
2 - .055"	Yellow	754SO155	$3.39	754SO510	$6.17
3 - .075"	Green	754SO165	$3.56	754SO191	$6.31
4 - .098"	Blue	754SO175	$3.85	754SO710	$6.81

Size	Color	25'	PRICE	50'	PRICE	100'	PRICE
1 - .035"	White	754SO813	$13.68	–	–	754SO194	$52.38
2 - .055"	Yellow	754SO525	$13.68	754SO192	$26.85	754SO181	$52.38
3 - .075"	Green	754CH1816	$13.72	754SO193	$26.85	754SO195	$52.21
4 - .098"	Blue	754SO725	$15.30	754SO817	$29.82	754SO196	$57.58

RoHS Compliant

No-Clean Wick Desoldering Braid – Anti-Static Bobbin

Size	Color	5'	PRICE	10'	PRICE
1 - .035"	White	754SO182	$3.43	754SO010	$6.17
2 - .055"	Yellow	754CH182	$3.39	754SO011	$6.17
3 - .075"	Green	754CH822	$3.56	754SO1810	$6.31
4 - .098"	Blue	754SO328	$3.85	754SO1812	$6.81

EasyBraid Co.

Quick Braid™ Desoldering Braid

Made of oxide-free clean copper and uses pure type 'R' resin flux conforming to all the requirements of Mil-F-14256F and ANSI/J-STD-004. Designed to leave a residue which is environmentally safe, and uses more strands of copper per square inch. **(USA)**

Size	Color	5'	PRICE	10'	PRICE
1 - .025"	Silver	325SO2035	$2.24	325SO2040	$3.76
2 - .050"	Gold	325SO2036	$2.24	325SO2041	$3.76
3 - .075"	Green	325SO2037	$2.30	325SO2042	$3.84
4 - .100"	Blue	325SO2038	$2.56	325SO2043	$4.26
5 - .125"	Brown	325SO2039	$2.74	325SO2044	$4.78

Wickgun™ Desolder Braid Dispenser

Wickgun™ desoldering braid dispensers combine the capabilities of desoldering braid with the convenience of a hand tool. Simple one-handed operation dispenses, positions and cuts off braid, even the smaller hard-to-control sizes. You never touch the braid. You don't burn your fingers. **Features:** replaceable/interchangeable cassettes, factory loaded with 15 foot (4.6 meter) lengths of pure copper braid impregnated with water clear flux. *Meets MIL-STD-1686.*

Dispenser
No. 892PR101 #4 Desoldering Braid **$39.95**
Replacement Cassette
No. 892SO154 #4 Desoldering Braid.....**$6.35**

Best Sellers

TECHNI-TOOL

Tec-Wik® ESD Desolder Braid

Made of oxide-free clean copper with pure type - "R" Resin Flux, our braid is designed to leave only environmentally safe residue. *Mfg to SPC Guidelines. Meets MIL-F-14256, Type R and ANIS/I-STD-004.*

Size	Color	5'	PRICE	10'	PRICE
1 - .025"	Gray	–	–	758SO006	$3.25
2 - .050"	Yellow	758SO102	$1.95	758SO007	$3.25
3 - .075"	Green	758SO103	$2.00	758SO008	$3.35
4 - .100"	Blue	758SO104	$2.25	758SO009	$3.70
5 - .125"	Brown	758SO005	$2.45	758SO011	$3.95

Tec-Wik® No Clean Desolder Braid

Oxide-free clear copper braid. Flux residue left on board doesn't need to be cleaned. For best results use with RMA-type No-Clean fluxes. *Mfg to SPC Guidelines. Meets ANSI/J-STD-004 and MIL STD 2000.*

Size	Color	5'	PRICE	10'	PRICE
1 - .025"	Gray	758SO120	$2.50	758SO025	$3.70
2 - .050"	Yellow	758SO021	$2.50	758SO026	$3.70
3 - .075"	Green	–	–	758SO027	$3.85
4 - .100"	Blue	758SO023	$2.95	758SO028	$4.30
5 - .125"	Brown	758SO024	$3.10	758SO029	$4.95

Handheld Vacuums

Paladin Tools

A. Edsyn SS350 Challenger Soldapullt®
One hand operation, metal barrel. Wt. 1.5 oz.
No. 330ED351 Low static standard **$18.53**
No. 330ED363 Replacement Tip for 330ED351 ..... **$2.94**

B. Edsyn Universal Soldapullt®
Adjustable three-position loading stroke, low-mass plunger, rapid vacuum impulse. Plastic construction. Wt. 2.0 oz.
No. 330ED370 ..... **$12.09**
No. 330ED340 Replacement Tip for 330ED370 ..... **$2.99**
No. 330ED284 "O" ring for 330ED370 ..... **$1.35**

C. Edsyn Silverstat® Plastic Construction
For low static work stations. Static conductive. Reduces component damage.
No. 330ED028 ..... **$28.80**
No. 330ED212 Replacement Tip for 330ED028 ..... **$3.80**
No. 330ED284 "O" ring for 330ED028 ..... **$1.35**

D. Edsyn SS750LS Challenger Plastic Construction
Single full stroke plunger and cleaning shaft for maximum vacuum flow. Soft push trigger. Powerful vacuum. Easy loading. Low Static. **(USA)**
No. 330ED752 ..... **$11.15**

E. Edsyn Soldapullt® III
Sturdy tool for routine desoldering. Slim profile, smooth action, very low recoil. Plunger lock for compact storage. Wt. 2.5 oz.
No. 330ED306 ..... **$19.26**
No. 330ED340 Replacement Tip for 330ED306 ..... **$2.99**

F. Edsyn Deluxe Soldapullt® Plastic Construction
Rugged, manual-loading tool for volume desoldering. High vacuum, heavy-duty plastic. Fully-enclosed shaft for safety. Plunger lock for compact storage. Wt. 3.5 oz.
No. 330ED082 ..... **$21.32**
No. 330ED340 Replacement Tip for 330ED082 ..... **$2.99**
No. 330ED284 "O" ring for 330ED082 ..... **$1.35**

G. Paladin All Metal Desolder Pump
Safety release prevents recoil damage. One-hand operation. Easily-exchangeable teflon nozzle with extra-long service life. 8" OAL.
No. 618TI016 ..... **$19.99**
No. 618TI028 Replacement Tip for 618TI016 ..... **$5.99**

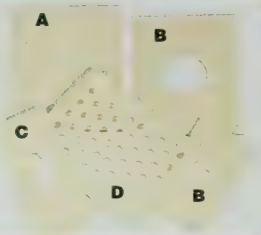
H. Weller Manual Desoldering Pump
One hand operation, spring-loaded piston provides ESD safe, solder removing vacuum. Self-cleaning, non-clogging, static-free replaceable tip included.
No. 812IR7874 ..... **$22.88**
No. 812TI875 Replacement Tip for 812IR7874 ..... **$4.86**

I. Weller Solder-Off Desoldering Bulb
Desoldering bulb with T.F.E. tiplet is a handy way to remove solder from boards. May be used with soldering iron. **(USA)**
No. 272SO016 ..... **$10.02**

Replacement Sponges

Replacement Solder Sponges
These all-natural, live porosity, replacement sponges are made to meet the exacting specification of their original counterpart. *Meets MIL- STD 2000.*

Style A - Grooved
Style B - Single Round Hole
Style C - Multiple Holes
Style D - Single Oval Hole



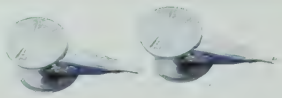
TT No.	Style	Use With	MFG#	Size	PRICE
432SO126	A	Hexacon	8101, 8101C, CS-3	3.4" x 4.4"	$18.05/10 pk.
432SO132	B	Hexacon	8121, 8121C, CS-9	3.4" x 4.4"	$18.05/10 pk.
468SO701	A	Weller	EC-3000	2.63" x 2.63"	$8.50/10 pk.
321SO110	D	Weller	EC-4000	2.63" x 2.63"	$13.65/10 pk.

TT No.	Style	Use With	MFG#	Size	PRICE
272SO058	A	Weller	TC205	2.5" x 2.4"	$1.95/Ea.
321SO111	A	Weller	MP Series	2" x 2.63"	$12.80/10 pk.
468SO002	A	Weller	CS-14	2.15" x 2.75"	$8.30/10 pk.
468SO130	A	Hexacon/ Weller	1001-02 DS-100	2.19" x 3.5"	$13.65/10 pk.
468SO302	A	Weller	EC-100/EC-100-1/ EC-2000-1	2.75" x 4.62"	$8.35/10 pk.
432SO134	B	Hexacon	1001-1002	2.25" x 3.5"	$13.65/10 pk.
468SO703	B	EDSYN	RS-199, CS-40	2.5" x 3.2"	$8.25/10 pk.
468SO503	C	Hakko	926, 700	1.75" x 4"	$8.25/10 pk.
321SO144	D	Hakko	927	2.7" x 2.7"	$12.10/10 pk.
468SO403	B	Weller	921ZX1	2.7" x 2.7"	$8.25/10 pk.
468SO001	B	Metcal	YS2	2.1" x 3.6"	$8.30/10 pk.
468SO801	B	Metcal	STSS YS-3	2.1" x 3.2"	$8.25/10 pk.
468SO101	B	PACE	4021-0005	1.5" x 2.15"	$8.25/10 pk.

Heat Sinks

HEXACON

HeatSink
Copper tipped clips. 1-1/8" long.
No. 432SO116 ..... **$6.35**



Xcelite

Heat Sink Tool
Protects transistors from heat during soldering. Positive no-slip spring tension action. 3-1/8" OAL.
No. 272SO080 ..... **$8.75**

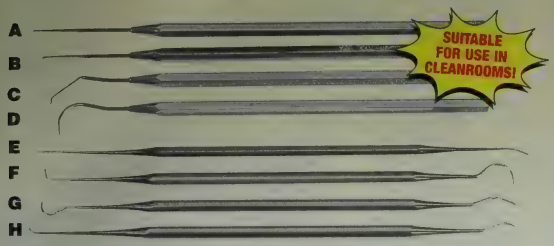
New!

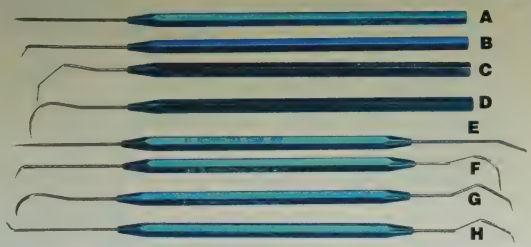
TECHNI-TOOL Standard Precision Probes

Micro-fine stainless steel tips won't rust or contaminate what they touch. Scalpel-sharp for fine probing, cleaning and testing solder joints, adjusting bent leads, micro positioning, much more. Designed to fit between new or fine-pitch thru-hole, surface mount and BGA devices.

Choose 10 mil pitch tips with aluminum handles or 25 mil pitch tips with blue anodized aluminum handles. Length: 4-1/2"; max tip: 1-5/16". **(USA)**

Best Sellers





10 MIL Precision Probes

Complete 8 Piece Set – *SAVE 10%*
Includes: #1 straight tip, #6 single bend, #17 triple bend, #23 hook, Double ended straight and curved, Double end single bend and hook, Double end triple bend and hook, and Double end single/double bend.
No. 758IE1000 ..... **$63.75**

Single-Ended 4 Piece Set – *SAVE 5%*
Includes: : #1 straight tip, #6 single bend, #17 triple bend and #23 hook.
No. 758IE000 ..... **$32.75**

Double-Ended 4 Piece Set – *SAVE 5%*
Includes: Double end straight and curved, Double end single bend and hook, Double end triple bend and hook and Double end single/double bend.
No. 758IE663 ..... **$34.55**

10 MIL Probes – Sold Separately
Single ended - Stainless steel tip with clear anodized aluminum handle. Double ended - Stainless steel tip and handle.

#1 Straight Tip
A. No. 758IE100 ..... **$8.80**

#6 Single Bend
B. No. 758IE101 ..... **$9.10**

#17 Triple Bend
C. No. 758IE102 ..... **$8.20**

#23 Hook
D. No. 758IE103 ..... **$8.35**

Straight/Curve
E. No. 758IE0103 ..... **$9.82**

Single Bend/Hook
F. No. 758IE515 ..... **$9.82**

Triple Bend/Hook
G. No. 758IE1723 ..... **$9.82**

Single/Double Bend
H. No. 758IE1419 ..... **$9.82**

25 MIL Precision Probes

Complete 8 Piece Set – *SAVE 10%*
Includes: #1 straight, #6 single bend,#17 triple bend, #23 hook, double end straight/double bend, Double end single bend/hook, 758IE1943, Double end triple bend/hook, and Double end single/triple bend.
No. 758IE2500 ..... **$28.65**

Single-Ended 4 Piece Set – *SAVE 5%*
Includes: #1 straight, $6 single bend, #17 triple bend and #23 hook.
No. 758IE973 ..... **$11.40**

Double-Ended 4 Piece Set – *SAVE 5%*
Includes: Double ended straight/double bend, Double ended single bend/hook, double ended triple bend/hook, and Double ended single/triple bend.
No. 758IE1945 ..... **$18.85**

25 MIL Probes – Sold Separately
Single and double ended - Stainless steel tip with blue anodized aluminum handle.

#1 Straight Tip
A. No. 758IE7300 ..... **$3.00**

#6 Single Bend
B. No. 758IE9730 ..... **$3.00**

#17 Triple Bend
C. No. 758IE7302 ..... **$3.00**

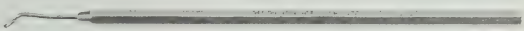
#23 Hook
D. No. 758IE7303 ..... **$3.00**

Straight/Double Bend
E. No. 758IE1940 ..... **$4.95**

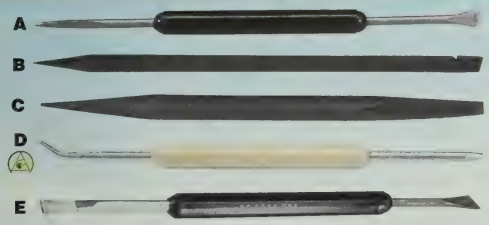
Single Bend/Hook
F. No. 758IE1942 ..... **$4.95**

Triple Bend/Hook
G. No. 758IE1943 ..... **$4.95**

Single/Triple Bend
H. No. 758IE1941 ..... **$4.95**

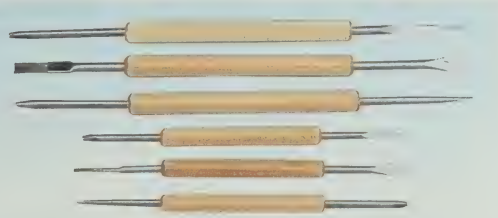


Micro Probe Tip with Sharp Chisel End
Excellent for touch-up work. 5-1/4" OAL. **(USA)**
No. 758IE025 ..... **$8.54**



Solder Aid Tools
Both ends of tool are insulated from one another. **(USA)**

Description	TT No.	OAL	Handle	PRICE
A. Reamer & Scraper Tip	388SO022	6-1/2"	Plastic	$1.58
B. Spudger	758SO301	6"	Plastic	$1.58
C. Spudger Fiber Construction	182SO020	5-1/2"	Fiber	$6.26
D. Micro Aid Fork & Hook	480SO016	5-1/2"	Wood	$4.86
E. Brush & Scraper Tip Stainless steel brush	388SO042	8"	Plastic	$6.18



Standard/Mini Solder Aid Kit - 6 pc
Contains the most frequently used soldering aids. **Includes:** Standard Aids: reamer/fork, angled reamer/fork, brush/scraper; Miniature aids: reamer/fork, angled reamer/fork, brush/scraper; case.
No. 182SO120 ..... **$33.73**

Tip Thermometers

HAKKO

FG-101 Soldering Tester

Measures tip temperatures, leak voltage and tip-to-ground resistance. Tester is resistant to drift and ambient temperature variations, ensuring highly reliable and accurate measurements. Max Hold function displays maximum value. Temperature sensors are easily replaced. Suitable for lead-free solder applications.

RoHS Compliant

FG101-10 measures 32-1300°F
No. 821SO1110.....**$1,141.37**

FG101-16 measures 0-700°C
No. 821SO1116.....**$1,141.37**

HAKKO

FG-100 Tip Thermometer

Measures soldering iron tip temperatures for verification or calibration. Also measures solder pot temperatures with optional probe. Sensor burnout alarm indicator. Max hold temperature feature. Auto shutoff turns off the thermometer after 3 minutes to save battery life. Choice of 2 models: 0-700° Celsius or 32-1300° Fahrenheit measurement range. Uses 9V battery.

Celsius Measurement
No. 821SO101 .....**$220.87**

Fahrenheit Measurement
No. 821SO105 .....**$220.87**

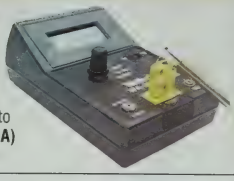
FG-101 & FG-100 Accessories

Optional Temperature Probe for Solder Pot Temperature Measurement (A1310)
No. 821AC310 .....**$168.67**

Replacement (191-212) Sensors
No. 821SO212 .....**$20.07 10/pk.**

Weller

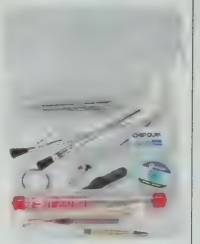
Soldering Iron Analyzer



Accurate and portable with a battery life of 50 hrs; LCD read-out in °F and °C; tests soldering stations in compliance with *ANSI-J/D.O.D.-2000*; tests tip temperature, tip to ground resistance and tip to ground noise. **(USA)**
No. 272ME200 (WA 2000).....**$806.40**

Reduced Heat = Reduced Damage!

CHIPQUIK® SMD Removal System



Remove QFPs, PLCCs, SOICs and chip components without costly and complex equipment. Use ChipQuik® with your existing rework equipment or temperature controlled soldering irons. Special removal alloy has excellent wetting ability with a low melting temperature of 136°F (58°C). To use: apply paste flux to all leads with syringe; melt ChipQuik alloy on all pins of SMD; with wide iron tip, maintain alloy in a molten state long enough to release chip; lift chip from board with pick-up tool. Safe, affordable, easy and won't damage sensitive components.

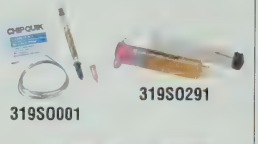
319SO2000

SMD Removal Kit
(flux, alloy, alcohol pads)
No. 319SO001 (SMD1).....**$14.85**

Removal Alloy 16', 6.5" lengths
No. 319SO016 (SMD16).....**$90.75**

Removal Alloy 32', 6.5" lengths
No. 319SO032 (SMD32).....**$165.00**

NoClean Paste Flux; 10cc syringe w/tip
No. 319SO291 (SMD291).....**$16.10**



319SO001

319SO291

319SO016/319SO032

Solder/Desolder Rework Kit
Includes: alloy, solder paste, flux, flux remover, probe kit, solder wick, handi vac, acid brush, tweezers, wipers, swabs, alcohol pads.
No. 319SO2000 (SMD2000).....**$115.50**

Lead Benders & Formers

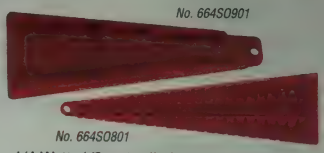
For Prototypes and Short Run Production!

Lead Bender

This lead bender for electronic components 1/4 watt and larger features finer pitch leadscrew for "micro" adjustment of jaws. Totally eliminates trial and error bending of component leads. Bent leads are free of all flat spots, nicks and surface blemishes. Fast, continuously adjustable setting of space between bends. Made from hard anodized aluminum for maximum strength and wear.
No. 428ST012 .....**$52.20**

Speedy Bend

Radiused edges, eliminates scarring of leads. Graduated in .050" increments. Made of high impact red cycolac plastic. Size: 5-1/2" long.



No. 664SO901

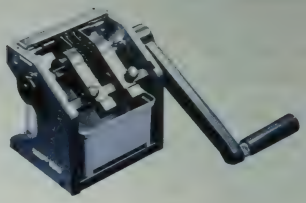
No. 664SO801

1 Watt, 2 watt
No. 664SO901.....**$4.80**

1/4 Watt, 1/2 watt, diodes
No. 664SO801.....**$4.80**

HAKKO

Lead Former



Features a wide adjustable bending length with high-quality cutting blade for a clean, smooth cut and long life. The unique component removal plate protects components from damage caused by the leads touching while being removed. (Japan)

Hakko 153 Lead Former: Forming size of 5.6mm (0.22 in.) pitch, with a max. lead diameter of 0.8mm (0.03 in.).
No. 821PL153 .....**$1,082.77**

HAKKO

Dip Liner

Your Hakko Dip Liner is a low-cost, high-performance tool for reforming IC and LSI leads. Speeds IC and LSI insertion. Simply insert the IC case into the Dip Liner chute, and the leads are protected right through circuit board insertion.

FT100: #IC Leads – 8, 14, 16, 18, 20
No. 821PR100 .....**$34.47**

FT200: #IC Leads – 24, 28, 40, 42
No. 821PR200 .....**$39.37**

ESD Safe

QFP Pin Straightening Tool

New!

For reworking and aligning bent pins on all sizes QFP and TQFP, pitch 0.4 mm to 1.0mm. Metal template includes 46 different QFP patterns. Verify number of pins, body size and pitch of unknown components.
No. 784SO900 .....**$155.00**

DIP Reformer

Reforms the leads on .300" and .600" DIPs for easier PCB insertion. Roller bearing with gap adjustment from 0 to .060" (factory set at .017"). Fabricated in hardcoat anodized aluminum. ESD safe with snap for attaching a ground strap . **(USA)**
No. 358PR360 .....**$100.00**

Comform I®

PAGE worldwide

Component-forming tool that measures hole-to-hole spacing and forms component leads for mounting.
No. 612PA6016 .....**$25.60**

Solder Tool and Reel Stands

HAKKO

Best Seller

Solder Reel Stand

Draw out your solder wire smoothly. Keeps your bench neat. Holds max. 1 kg. solder wire roll.
(Solder sold separately)
No. 821SO611 Single Reel.....**$13.47**
No. 821SO6112 Dual Reel.....**$19.27**

Weller

Soldering Tool Stands

Heavy non-sliding cast aluminum bases with sponge receptacle and "non-heat-sinking" spring stand and funnel. For 272IR324, 272IR328, 272IR025, 272IR030 & 272IR035 Irons.
No. 272SO042 .....**$24.77**
Sponge for 272SO042 & 272SO038
No. 272SO058.....**$1.95**

EDSYN

Solder Spool Holder - Labeled for Lead-Free

Static safe holder has self-adhesive bottom. Keeps solder clean and separate from other leaded solder. Small footprint, easy-to-use. Holds 1 lb. spool.
(Lead-free solder sold separately)
No. 330SO287.....**$24.80**

Weller

Solder-Mate™

This durable dispenser minimizes core solder usage and eliminates operator downtime by providing continuous solder wire availability. Holds 1 lb. solder spool. *(Solder sold separately)*
No. 812SO001 .....**$9.95**

Tip Tinners and Cleaners

TECHNI-TOOL

Best Sellers

Lead-Free Tip Tinner

Formulated to prolong tip life from the harsh soldering environments of Rosin, No-Clean and Water Soluble Fluxes. The usage of these fluxes allow the build-up of oxides on the tip, causing poor thermal heat transfer and dewetting of the tip surface. **(USA)**

758SO015

758SO115

No. 758SO015 0.5 oz. .....**$6.64/Ea.**
No. 758SO115 1.5 oz. .....**$9.30/Ea.**

RoHS Compliant

PLATO

Tip Tinner/Cleaner Lead Free

This thermally-stable tinner/cleaner is residue-free, lead free, ESD and environmentally safe. This compound provides improved cleaning and re-tinning of highly oxidized soldering iron tips safely and efficiently. 0.7 oz. **(USA)**
No. 657SO095.....**$5.83/Ea.**

RoHS Compliant

TECHNI-TOOL

Tip Cleaner

Cleans without water so your tip stays hot!
No. 758SO599 .....**$8.89**
Replacement Tip Cleaner
No. 758SO592 .....**$6.95**

Best Seller

HAKKO

599B Tip Cleaner

Cleans better than conventional sponges. No water required. Will not reduce the tip temperature. (Japan)
No. 821SO5992.....**$9.47**

Weller

Tip Tinner and Activator

Works fast and easily with low temperature for regeneration of oxidized tips. Environmentally safe. 1.5 oz.
No. 272SO3199.....**$8.61**

RoHS Compliant

PLATO

Desoldering Tip Cleaning Tool

Remove unwanted solder and flux build-up from desoldering tip IDs from solder collector paths. Just select the proper diameter rod from the tool and push out any unwanted loose particles or solder. .020" (.5mm) to .065" (1.65mm) diameter.
No. 657PR5000 .....**$8.34**

Weller

The solution for tip cleaning with lead free solder

WDC Dry Tip Cleaning System

The WDC (Weller Dry Cleaner) uses a special metal wool ball to gently clean lead-free solder. First tap tip on ESD-safe soft rubber edge of solder collection box, then push into wool ball and turn to clean. A fine layer of tin remains on the tip to reduce oxidation. Process keeps tip temperature constant to avoid tip shock.
No. 272SO2499 .....**$17.20**
Replacement wool balls, 2/pack
No. 272SO1382 .....**$5.38**

SUPERIOR LEAD FREE PERFORMANCE

EDSYN

Lead-Free Tip Tinner

Easy-to-use lead-free tip tinner and cleaner extends tip life Leaves no residue and is ESD safe. 0.5 oz. **(USA)**
No. 330SO202.....**$5.40**

HEXACON

Tip Scrubber

Composition cleaner. Removes oxidation, flux and residues.
No. 432SO286 .....**$8.19**

Tip Polishers

PLATO

Tip Polishing Bar

Restore detinned tips for additional service. If the tips are not pitted or worn, buffing with polishing bar will clean the tips and restore new life.
No. 657PR300 .....**$15.09**

Weller

A must with Lead-Free Solder Applications!

Polishing Bar

Use this heavy polishing bar to clean your solder tips. **(USA)**
No. 272SO010 .....**$8.61**

HAKKO

FT-700 Tip Polisher

Removes tip oxidation caused by lead-free and high temperature soldering. Uses rotating brass brushes to remove oxidation without damaging tip plating. Includes FS-100 lead-free chemical paste.
No. 821SO700.....**$149.97**

FS-100 Lead-Free Chemical Paste
No. 821SO701 .....**$9.97**

New!

BRADY

Load. Click. Print. It's just that simple.

IP Printer System

Thermal transfer printer reads computer chip in ribbon roll to make label set-up fast and error-free. Prints up to 5,000 labels per day. **Features:** Saves time with automatic size, speed and heat adjustments; Reduces print time even with custom labels; Eliminates wasted labels; No more calibration for notched, gapped or continuous material. Lightweight, flip top compact design. **Specs:** Material width: 4.16"; Minimum Material Height: 0.125"; Connectivity: USB, serial and 10/100 Ethernet; Ribbon facing: In or Out - IP enabled ribbon needed.

300 dpi Printer
No. 207IE301 .....**$1,929.00**

600 dpi Printer
No. 207IE602 .....**$3,029.00**

Ribbon - Thermal Transfer, Black

TT No.	Series	Roll Size	PRICE
207IE4301	4300	3.27" x 984'	$129.51
207IE4303	4300	2.36" x 984'	$94.95
207IE4305	4300	4.33" x 984'	$185.74

TT No.	Series	Roll Size	PRICE
207IE6002	6000	2.36" x 984'	$88.34
207IE6003	6000	3.27 x 984'	$121.62
207IE6005	6000	4.33 x 984'	$161.62

- Intuitive key pad with electrical and datacom symbols
- Special wire marking mode with 10 preset lengths
- Prints general, banner or wire marking labels
- Built-in cutter and auto shutoff
- FCC Class A approved

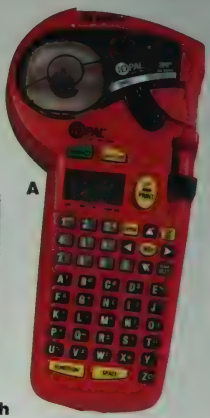
A. ID PAL Thermal Transfer Printer

Prints upper and lower case characters in your choice of font size with multiple line printing available. Affordable, easy-to-use and tough--tested to withstand a 4-foot drop on concrete. Features quick, top-load, drop-in cartridges with labels designed to stick better to harsh environments and curved and textured surfaces. Prints over 3,500 1.0" labels with six AA batteries (not included). ***Six-Month Warranty (One-Year if registered).***

No. 207IE800.....**$99.00**

Impact Guards - Fit on top and bottom of printer to provide extra impact protection.
No. 207IE801 .....**$9.00**

No. 207IE803 Hardside Carrying Case **$30.00**
No. 207IE802 AC Adapter **$33.00**



Label Cartridge

Label Cartridges

Recommended for Smooth/Flat and Textured Surfaces

White Polyester
No. 207IE807 0.375" x 21' **$18.64**
No. 207IE808 0.500" x 21' **$18.64**
No. 207IE809 0.750" x 21' **$20.71**

Clear Polyester
No. 207IE816 0.375" x 21' **$18.64**
No. 207IE817 0.500" x 21' **$18.64**
No. 207IE818 0.750" x 21' **$20.71**

Recommended for all Surfaces

White Vinyl
No. 207IE804 0.375" x 21' **$19.67**
No. 207IE805 0.500" x 21' **$19.67**
No. 207IE806 0.750" x 21' **$22.78**

Yellow Vinyl
No. 207IE813 0.375" x 21' **$19.67**
No. 207IE814 0.500" x 21' **$19.67**
No. 207IE815 0.750" x 21' **$22.78**

White Nylon Cloth
No. 207IE810 0.375" x 19' **$25.24**
No. 207IE811 0.500" x 19' **$25.24**
No. 207IE812 0.750" x 19' **$28.54**

B. v2.0 IDXPERT™ ABC Handheld Labeler

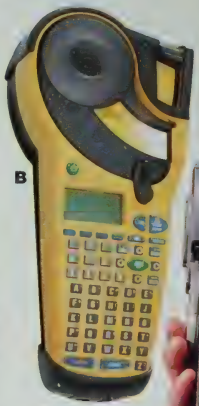
300 dpi handheld thermal labeling system for patch panels, outlet faceplates and cables.

- Prints die-cut labels, self-laminating wire & cable markers, PermaSleeve wire markers, continuous tapes and more
- Prints more sizes than ID PAL
- More codes: 39 bar codes & 82 symbols
- Electronically pre-calibrated for label orientation
- Memory stores frequently used set-ups
- Drop Lock & Go cartridges

New features include: *PC-connect printing, 10 additional font sizes and slide-in strips for Voice/Data punch blocks and faceplates.* **Specifications:** Display: LCD; Character height: 1.25"; Max label width: 1.5"; Max print width: 1.25"; Max roll length: 30'; Text size: 11 (7 to 128 point), single color; 1D (Linear) bar code type; 10 label memory. Uses 6 AA batteries or optional AC power.

No. 207IE123 .....**$399.95**

30'L, Black on White Label Cartridges
No. 207IE124 .500"W .....**$43.76** **No. 207IE125** 1.000"W ....**$55.05** **No. 207IE126** 1.500"W **$65.07**

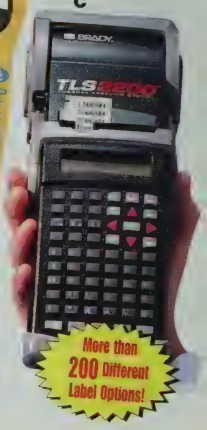


Label Cartridge

C. Thermal Transfer Printer

Make crisp accurate bar codes and labels that won't smear. This handheld thermal transfer printer accepts labels and wire markers up to 2" wide. Has more than 200 different label options that recognizes the label you're using, determines the text size and automatically adjusts itself without wasting material. Replace your ribbon in seconds just pull out the used cartridge and insert a new one. Adjustable for six different widths of labels. UL and CUL listed battery charger. Prints 500 labels between battery charges. **Includes:** hard case, ribbon, battery pack, dust cover, battery charger, manual, test labels and one cleaning card. **(USA)**

No. 207PR220.....**$795.00**



Label Cartridge

Black Ribbon for Label Printer
(Suitable for different printing material)

No. 207IE819 R4310, 75 ft. **$26.83**
No. 207IE820 R6010, 75 ft. **$26.83**
No. 207IE821 R6210, 75 ft. **$26.83**

Accessories for Label Printer

No. 207IE822 Extra Battery **$83.95**
No. 207IE823 Charger **$39.95**
No. 207IE824 AC Adapter **$111.25**
No. 207IE556 Cleaning Kit.....**$13.25**

Taped Axial, Radial & SMT Component Counters

The **Gold-Count™** with its auto forward/reverse sensing makes component counting foolproof. Features include state-of-the-art photoelectric sensor, AC or convenient battery operation with backup charger (on removable counter unit), divide-by to permit exact count of virtually all types and sizes of components, presettable count, and a push-button marker for taped components. The motorized model (GC-40) has a variable forward or reverse speed control. Changeovers from SMD to axial or to radial components are quick and easy. The counter is compact, heavy-duty, and lifts easily off its reel stand for portability.

TT No.	Model	Description	Features	PRICE
172PR114	GC-12	Standard Component Counter w/GC-RS	• 4 digit LCD Display • Divide by feature • SMD, axial, radial compatibility • AC only	$1,995.00
172PR116	GC-30	Deluxe Component Counter w/GC-RS	• Presettable count with audible beep • SMD, axial, radial compatibility	$2,495.00
172PR118	GC-40	Standard Component Counter w/GC-RS	• AC or battery operation with integral changer • Divide by feature • 5 digit LCD	$3,995.00

F-1 Taped Axial Trimmer/Former

The F-1 cuts and bends to a right angle. Cut lengths are independently adjustable. Leads are overbent to compensate for lead springback. Adjustment merely requires loosening of two screws. High-speed output of 26 components per turn. Comes complete with bench clamp and easy-to-use set up gauge. Tooling available for stand ups and cut-only as well as heavy leads, .030" to .050" (.76mm to 1.27mm).
No. 172PR001 .....$995.00

R-1 Taped Radial Component Trimmer

Exclusive tapered blade design produces clean cut without stress to component body. This high speed processor cuts 12 components per revolution. Dual cutting edges for twice the blade life. Easily adjustable cut lengths in less than one minute.
No. 172PR111 .....$995.00

RTV Loose Radial Component Trimmer

Trims virtually all loose in-line radial components with its unique rotary cutting system. Lead length gauge with adjustment knob allows changeovers in seconds. Designed to perform reliably for many years. Widest range of loose radial components: various Caps, TO-92s, LEDs, SIPs, TO-220s, etc.
No. 172PR162.....$2,500.00

PCB Repair Kits

CIRCUITMEDIC

Professional Repair Kit for Your Tasks!

Circuit Board Repair and Rework Kits

Repair damage to surface mount and BGA pads, gold edge contacts, plated holes, circuit board base materials and much more with specialized repair and rework kits. Economical and time-saving, these kits include the Professional Repair Kit for most repair tasks, as well as the Land Repair Kit, Micro Pad Repair Kit, and the Circuit Repair Training Kit. All kits include replacement circuits with dry-film epoxy backing. The new circuit is bonded in place with a bonding iron included in each kit. Contains no messy liquid epoxies. **(USA)**

Land Repair Kit, 120 VAC
No. 246SO1110 (201-1110) ..**$349.00**
Professional Repair Kit, 120 VAC
No. 246SO2100 (201-2100) ..**$699.00**
Micro Pad Repair Kit, 120 VAC
No. 246SO1100 (201-1100) ..**$299.00**
Circuit Repair Training Kit, 120 VAC
No. 246SO2110 (201-2110) ..**$399.00**

Soldering Skills Practice Kits

CIRCUITMEDIC

Soldering Skills Practice Kits

Are your new soldering and rework operators skilled enough to work on your valuable products? Have they practiced enough to go for certification? The best way to find out is to order our Soldering Skills Practice Kit that lets them work on actual projects until they develop the expertise they need. We provide the tools and practice board and you decide when they're ready.

Solder Skills Practice Kit
No. 246SO4150 (201-4150)....**$79.00**
Rework Skills Practice Kit
No. 246SO425 (201-4250)....**$149.00**
Repair Skills Practice Kit
No. 246SO4350 (201-4350) ..**$129.00**

LET US BE YOUR
ONE STOP SUPPLIER...
across the globe or just across town.

TECHNI-TOOL

Easy Seller

PLCC Extraction Tool

Self-opening spring action for more user comfort. Fits all size PLCC carriers that are JEDED sockets from 20 to 124 leads.

ESD Safe Pull Tool
No. 758IE224 .....$13.95

Non-ESD Pull Tool
For PLCC 20-84 pins.
No. 606PR066 .....$10.71

TECHNI-TOOL

Contact Removal and Insertion Kit - 3 pc

Insertion & removal tools for service of Cannon, Amphenol, Burndy connectors, etc. Color-coded aluminum handles with machined tubular steel end. For front release contacts.

Removal Kit #12, 16, 20
A. No. 758IE004 .....$99.70
Insertion Kit #12, 16, 20
B. No. 758IE005 .....$99.70

Tyco Electronics
Insertion/Extraction Tools

SMT Extraction Tool

(For 20 thru 84 Pos. Sockets) This tool is designed to remove PLCC from Low Profile Surface Mount Sockets. Contoured and angled for easy chip extraction. **(USA)**
No. 104PR154.....$3.95

7-in-1 Insertion & Extraction Tool

Includes: One insertion/extraction handle w/cap, one hex wrench, one plug, & four insertion/extraction tips. **(USA)**
No. 104PR010 .....$16.95

Pin & Socket Insertion/Extraction Tool

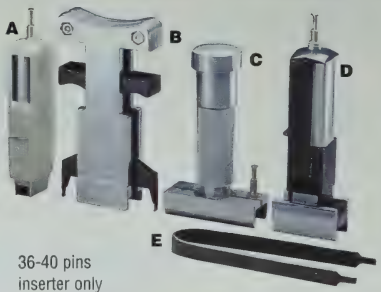
This is the tool you need to install and remove Use with contact size 20DM & 20DF & 20-26 AWG. *Meets Mil Spec.* **(USA)**
No. 104CO726.....$7.99

IC Insertion/ Extraction Kit - 5 pc

This kit consists of DIP IC extractors and inserters to accommodate all IC's from 8 to 40 pins. **Kit includes:** Extractors: 606WI548 (Ex-1) for 8-24 pin devices and 606MI026 (Ex-2) for 24-40 pin chips; Inserters: 606WI752 (MOS-1416), 606WI753 (MOS-2428), and 606WI756 (MOS-40) for 14-16, 24-28, and 36-40 pin IC's respectively. **(USA)**

5 pc Kit
No. 606WI1162 .....$81.43

Sold Individually
14-16 pins inserter only
A. No. 606WI752.....$19.98
24-40 pins extractor only
B. No. 606MI026.....$22.95



36-40 pins inserter only
C. No. 606WI756.....$22.95
24-28 pins inserter only
D. No. 606WI1753 .....$22.95
8-24 pins extractor only
E. No. 606WI548.....$3.32

pico Technology Limited

Electrical Contact Assembly Tools

Insertion-Front Release/Rear Release

Size: 20; Color: Red
No. 650PR861 .....$45.82
Size: 16; Color: Blue
No. 650PR001 .....$31.50
Size: 12; Color: Gold
No. 650PR451 .....$31.50

Removal-Front Release/Rear Removal

Size: 20; Color: Red
No. 650PR802 .....$30.70
Size: 16; Color: Blue
No. 650PR114 .....$31.50
Size: 12; Color: Gold
No. 650PR612 .....$31.50

Caps Off Keycap Puller

No more struggling – just push it over the keycap and lift. Even keycaps in tight spaces can be removed instantly. Won't mar appearance. Works great on virtually every keycap from 3/4" single units to 2.5" triple units – square, rectangular, round, or triangular.
No. 758IE0100 .....$5.60

JONARD INDUSTRIES CORP

Pin Extractor

A plunger style pin extractor for pushing pins out from behind the connector blocks for contact sizes 16-20. 3" OAL. **(USA)**
No. 479PR592 .....$12.16

Wiha

Chip Lifter

Blade chrome-vanadium-molybdenum-steel, hardened, chrome-plated. Slender handle high quality plastic, impact resistant, black, cadmium free. 5.71" OAL.
No. 881SC810.....$5.40

pico Technology Limited

Insertion/Extraction Tool 6/Pk

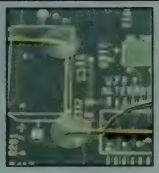
Connector Application; MIL-C-5015 "3450" Series, MIL-C-26482 Series 2, MIL-C-38999 All Series MIL-C-81703 Series III, MIL-T-81714 MIL-C-83723 Series II & III, MIL-C-83733 All Series

TT No.	Size	Military Part No.	PRICE/6 pk.
650PR141	22M	M81969/14-01	$9.95
650PR142	20	M81969/14-11	$9.95
650PR143	16	M81969/14-03	$13.50
650PR144	12	M81969/14-04	$13.50

Hold wires in place permanently!

Circuit Technology Center

Flextac Tape Dots



Pre-cut shapes of thin, flexible polymer film membrane. Permanent, pressure-sensitive adhesive results in a strong bond. Available in a round or square shape and two sizes. **Specs:** Backing: Polymer film; Adhesive: Electronics grade permanent pressure sensitive; Thickness: 2 MIL; Dielectric Strength: 3400V.

Variety Pack -
All sizes, all shapes. **370/Pk.**
No. 246SO321.....**$37.50**

Round 6.5mm (.256") Dia. **450/Pk.**
No. 246SO3100.....**$37.50**

Square 6.5mm (.256") Dia. **450/Pk.**
No. 246SO652.....**$37.50**

Round 10.0mm (.394") Dia. **210/Pk.**
No. 246SO301.....**$37.50**

Square 10.0mm (.394") Dia. **210/Pk.**
No. 246SO1002.....**$37.50**

Eyelet Systems

Circuit Technology Center

Everything you need to repair plated holes in many sizes!

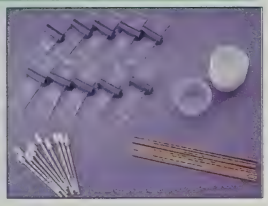
Plated Hole Repair Kit

This kit includes the tools and materials you'll need to repair damaged through holes in circuit boards. Includes a variety of eyelet sizes, carbide ball mills for drilling, and setting tools to form the eyelets conforming to IPC guidelines. Eyelets are made of pure copper electroplated with solder.

No. 246SO3140 (201-3140) **$199.00**

JUST THE FACTS			
TT No.	Kit Includes	Description	PRICE
246SO726	100	Eyelet, Flat .020" ID x .094" L	$39.50
246SO736	100	Eyelet, Flat .030" ID x .093" L	$39.50
246SO766	100	Eyelet, Flat .036" ID x .093" L	$39.50
246SO746	100	Eyelet, Flat .045" ID x .090" L	$39.50

Epoxy Kit



Epoxy with coloring agents and use to repair solder mask or base board defects, for overcoating, or use clear for bonding circuitry.

Contains 10 packages of clear, low viscosity superior strength epoxy, precisely measured into two-compartment plastic packages so no measuring is required. Also contains mixing sticks, mixing cups and foam swabs. Epoxy specs: 2 gram prepackaged containers; clear color; 30 min. pot life, cures in 24 hours at room temperature/1 hour at 165° F; operating temperature: -76°F to 284°F (-60°C to 140°C).

No. 246SO132 (115-1322) **$89.00**

Solution Kits

Plating Solution Kits

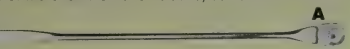
Each kit includes Gold and Nickel plating solutions, Electroclean preparation solution and Solder Strip chemical stripping solution. Solutions also sold separately.

JUST THE FACTS		
TT No.	Description	PRICE
246SO380	Plating Solution Kit, 1 oz. each	$445.00
246SO385	Plating Solution Kit, 4 oz. each	$795.00
	Individual Solutions	
246SO382	Gold, 1 oz.	$245.00
246SO384	Gold, 4 oz.	$595.00
246SO844	Electroclean, 4 oz.	$125.00
246SO854	Solder Strip, 4 oz.	$125.00

Techni-Tool® Micro Spatulas

TECHNI-TOOL

All stainless steel micro spatulas are flexible, efficient aids for mixing and blending small quantities of material. Non-stick blades, corrosion-resistant.



A

Micro Spoons– one end is spoon shaped, 1-1/8" long by 9/16" at widest part. Other end is flat, 1-7/8" long. Excellent for transferring powdered or crystalline samples. Square end used for scraping and chopping small grains. 9-1/4" OAL.
A. No. 758SO0022 .....**$5.15**

B

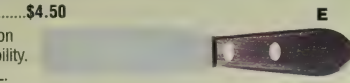
Flat ends 1-1/8" long. Glazed finish. 8" OAL.
B. No. 758SO0012 .....**$4.10**

C

Flat ends 1-1/2" long, one tapered. Glazed finish. 8" OAL.
C. No. 758SO0016 .....**$4.10**

D

Flat ends 1-1/8" long. One end round, other tapered. 7-1/4" OAL.
D. No. 758SO0020 .....**$4.50**



E

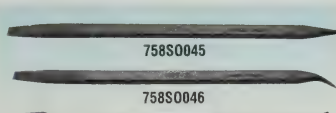
4" stainless steel, precision ground for uniform flexibility. Wood Handle. 7-1/2" OAL.
E. No. 758SO0026 .....**$7.50**

SAVE! - 5 pc Micro Spatula Set

Includes one each of above.
No. 758SO0027 .....**$22.85**

TECHNI-TOOL

Magic Wand Multi-purpose Tool



758SO0045

758SO0046

758SO0047

Use as probe for lead-free soldering, positioning aid tool, spatula, stirring rod, scraper and more. Made of ESD-safe, high performance PEEK reinforced with carbon fiber. Very high chemical and temperature resistance (to 300°C). For lead-free soldering and chemical applications.

Fine tip and flat strong tip
No. 758SO045 .....**$10.90**

Curved fine tip and flat strong tip
No. 758SO046 .....**$10.90**

Flat large fine tip and flat fine sharp tip
No. 758SO047 .....**$10.90**

Orangewood Sticks/Brushes

Used for separating electrical components and in manufacturing and repair. Strong enough to use for wiring yet will not mar valuable components.

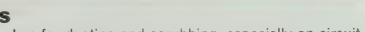
Double Beveled on both ends

No. 758SO018 7" OAL **$5.90 12/Pk**
No. 758PR002 7" OAL **$16.72 100/Pk**

Single/Double Beveled

No. 758SO2930 7" OAL.....**$17.46 100/Pk**

Orange Stick Brushes



Wood handle detail brushes for dusting and scrubbing, especially on circuit boards. Chiseled handle on one end for debris removal. 7" OAL, 3/16" dia. 1/2" bristle trim length. **(USA)**
No. 758CH770 (Hog Bristle) **$4.18**
No. 758CH771 (Horse Hair).....**$4.18**

Kapton® & Polyimide Tape

3M 5413 Polyimide Film Tape

Kapton® hi-temp film tape is flame, radiation and chemical resistant. Designed for high temperature applications like wave soldering. Use at -100°F to 500°F. **Specs:** Backing: Kapton® Polyimide Film; Adhesive: Silicone; Thickness: 1 MIL; Adhesion to steel: 22 oz./in.; Tensile: 33 lbs./in.; Color: Amber; Core: 3"; Length: 36 Yards. **(USA)**

No. 105IE5413 1/4"....**$14.50** **No. 105AD413** 3/4"....**$42.52**
No. 105ST414 3/8" ....**$21.70** **No. 105ST416** 1" **$61.54**
No. 105ST415 1/2" ....**$29.50** **No. 105ST5413** 2" **$123.07**

3M 1205 Polyimide Film Tape - Acrylic

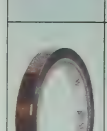
Use for high temperature electrical applications regarding a tough, thin solvent resistant insulating material for wrapping coils, transformers, capacitors and wire harnesses. **Specs:** Backing: Polyimide film; Adhesive: Acrylic; Thickness: 3 MIL; Dielectric strength: 7500V; Insulation; Resistance: 1 x 10⁶MΩ/sq.; Core: 3"; Length: 36 Yards. **(USA)**

No. 105AC120 3/8"W ....**$14.19** **No. 105AD205** 3/4"W....**$25.74**
No. 105PR1205 1/2"W ....**$18.20** **No. 105ST1205** 1"W....**$35.20**

3M 92 Polyimide Film Tape

Designed for high temperature electrical applications like coils, capacitors and wire harnesses. Flame retardant Exceptional heat resistance, may be applied at very low temperatures. **Specs:** Backing: Kapton® polyimide film; Adhesive: Silicone; Thickness: 3 MIL; Dielectric strength: 7500V; Insulation; Resistance: 1 x 10⁶MΩ/sq.; Color: Transparent amber; Core: 3"; Length: 36 Yards. **(USA)**

No. 105PR1436 1/4"W ....**$9.62** **No. 105PR3436** 3/4"W **$28.34**
No. 105PR1236 1/2"W ....**$18.99** **No. 105PR136** 1"W **$37.70**



Shercon #22 Polyimide Tape

Kapton tapes have been designed for both electronic and powder coating applications where temperature resistance of 500°F is required. Ideal for protecting areas from solder during reflow and hand soldering operations. **Specs:** Backing: Polyimide® (Kapton®) Film (1 MIL); Adhesive: Silicone; Thickness: 2.5 MIL; Adhesion to steel: 36 oz./in.; Tensile: 30 lbs./in.; Color: Amber Transparent; Length: 36 Yards. **(USA)**

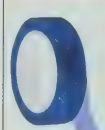
No. 706ST026 1/4" ....**$5.25** **No. 706ST750** 3/4" **$15.75**
No. 706ST037 3/8" ....**$8.50** **No. 706ST108** 1" **$25.95**
No. 706ST050 1/2" **$10.50**

Shercon Low-static Polyimide Film Tape

This high temperature, low static film tape designed for electrical and thermal insulation, in particular, in the masking of gold fingers on circuit boards during wave desoldering. Flame resistant, to can also be used as a wire and cable wrap, as well as for solder masks. **Specs:** Resistance: >1 x 10⁶Ω/sq.; Dielectric strength: 7,000V; Backing: Polyimide; Adhesive: Silicone; Thickness: 2.7 MIL; Adhesion to steel: 20 oz/in.; Temp. range: -100°F to 500°F; Length: 36 yds. **(USA)**

No. 706ST2425 1/8"W ....**$8.25** **No. 706ST0625** 5/8"W **$33.00**
No. 706ST2450 1/4"W ....**$13.50** **No. 706ST0750** 3/4"W **$42.00**
No. 706ST2375 3/8"W ....**$20.00** **No. 706ST1000** 1"W **$55.00**
No. 706ST0500 1/2"W ....**$29.00** **No. 706ST200** 2"W **$73.00**

Polyester Tape



Shercon Polyester Film Tape - High Temp

This tape has been designed for coating applications where temperature resistance up to 400°F required. The silicone adhesive system has been designed to resist heat, fumes and chemicals. Removes easily and leaves no residue. Ideal for masking during plating. **Specs**: Backing: Polyester Film 1.0 MIL; Adhesive: Silicone; Color: Blue; Roll Lg: 72 yards. 3 MIL. **(USA)** **Only 36 yards.*

No. 706ST9514 1/4"....**$6.37** **No. 706ST902** 3/4"....**$10.00**
No. 706ST901* 1/2"....**$6.75** **No. 706ST903** 1" **$11.50**

SHERCON Inspection Arrows

Use for flagging, identification, quality control, inspection, instructions, etc. Leaves no residue. Won't fade, dry out, curl, lift or become brittle.

	PAPER			VINYL
	1000/RL	5000/RL	5000/ENV.	5000/RL
3/16"L X 1/8"H (2 OZ)				
Red	706SO327	706ST1111	706SO353	706SO362
1/4"L X 3/16"H (3 OZ)				
Red	706SO5030	706SO1122	706SO002	706SO1402
3/8"L X 1/4"H (4 OZ)				
Red	706SO015	706SO1108	706SO397	706SO443
3/4"L X 5/16"H (5 OZ)				
Red	706SO478	706SO488	706SO507	706SO528
PRICE	$4.00	$8.95	$19.50	$19.50

Kapton® & Polyimide Tape

Techni-Tool Kapton® Tape

Use for flame resistant electrical insulation, wire and cable wrap, wire bundling termination, splicing of Hi-Temp reflective thermal insulating film. Excellent solder mask for circuit boards. Release surface for heated platens in heat sealing/laminations. **Specs:** Backing: Polyimide; Adhesive: Silicone; Thickness: 2.5 MIL; Tensile Strength: 30 lbs.; Length: 36 Yards. **(USA)**

No. 758ST9513 1/8" ....**$5.37** **No. 758ST9558** 5/8" **$16.32**
No. 758ST9514 1/4" ....**$7.65** **No. 758ST9534** 3/4" **$20.34**
No. 758ST9538 3/8" ....**$9.94** **No. 758ST9578** 7/8" **$24.99**
No. 758ST9512 1/2" ....**$14.13** **No. 758ST9501** 1" **$26.52**

Techni-Tool Anti-Static Kapton® Tape

ESD version of Kapton® tape minimizes static generation during stripping and peeling. Withstands temperatures up to 500°F (260°C). **Specs:** Backing: Anti-static polyimide film; Adhesive: Silicone; Thickness: 2.5 MIL; Dielectric Strength: 7500V; Length: 36 Yards. **(USA)**

No. 758ST888 1/8" ....**$5.50** **No. 758ST3361** 3/4" **$35.00**
No. 758ST1643 1/4" ....**$11.00** **No. 758ST778** 7/8" **$43.00**
No. 758ST138 3/8" ....**$15.00** **No. 758ST3161** 1" **$45.00**
No. 758ST3561 1/2" ....**$22.00** **No. 758ST3261** 2" **$100.00**
No. 758ST158 5/8" **$28.00**

Techni-Tool Kapton® Film Dots

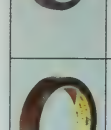
Use these die cut labels as a mask when wave soldering printed circuit boards. Tear, abrasive and heat resistant to 500°F. Yellow. **(USA)**

2000/roll **1000/roll**
No. 758ST95164 1/4" ....**$24.74** **No. 758ST9340** 3/4" **$62.98**
No. 758ST5516 5/16" **$34.69**
No. 758ST9380 3/8" **$47.18**
No. 758ST5012 1/2" **$57.38**

Techni-Tool Polyimide Film Tape

For high temperature applications. Has superior electrical insulation and is chemical and abrasion resistant. **Specs:** Backing: Polyimide Film; Adhesive: Silicone; Dielectric Strength: 7000V; Thickness: 2.5 MIL; Adhesion strength: 23 oz./in.; Tensile: 27 lbs./in.; Resistance: 1 x 10⁶ MΩ/sq.; Color: Amber; Length: 36 Yards. **(USA)**

No. 758ST0125 1/8" ....**$4.60** **No. 758ST0625** 5/8" **$11.75**
No. 758ST0250 1/4" ....**$4.75** **No. 758ST0750** 3/4" **$14.25**
No. 758ST0375 3/8" ....**$13.35** **No. 758ST0875** 7/8" **$16.75**
No. 758ST0500 1/2" ....**$9.50** **No. 758ST1101** 1" **$34.85**



3M 5419 Low Static Polyimide Film Tape

Used on printed circuit boards during solder process. Very low electrostatic discharge properties. Static Charge: (@50% RH, 70°F): Removal from roll: <150 volts; Removal from PWB: <50 volts. **Specs:** Backing: Polyimide; Adhesive: Silicone; Dielectric strength: 7000V; Thickness: 2.7 MIL; Adhesion to steel: 20 oz./in.; Tensile: 33 lbs./in.; Insulation resistance: 1 x 10⁶Ω/sq.; Color: Gold; Core: 3"; Length: 36 Yards. **(USA)**

No. 105ST423 1/4" ....**$14.75** **No. 105ST421** 3/4" **$44.20**
No. 105ST419 3/8" ....**$22.75** **No. 105ST424** 7/8" **$51.60**
No. 105ST420 1/2" ....**$25.55** **No. 105ST422** 1" **$57.55**

Splicing & Terminating Tapes

3M Scotch® 69 Glass Cloth Tape

Woven glass cloth with thermosetting pressure sensitive adhesives which electrically insulate at high temperatures. **Specs.:** Backing: Glass cloth; Adhesive: Silicone; Thickness: 7.5 MIL; Dielectric strength: 3,500V; Insulation resistance: 250 MΩ/sq.; 3/4" x 66'.

No. 105AD069 3/4" x 66' **$23.00**

Cold Shrink Tape

This tape bonds to itself permanently. Ideal for "buried" applications. Better insulating qualities than electrical tape. Black.

No. 887IE2515 3/4"W x 30'L....**$9.95**
No. 104AD685 1"W x 10'L **$9.86**

Silicone Tape

300% stretch wrap silicone tape masks irregular shapes. No adhesives means no secondary clean up. Fuses to itself within 24 hours. **Specs.:** Dielectric strength: 400V/mil. Operating temp: -45°C to 200°C; Size: 1" x 36' (12 yds.).

No. 576MI001 ....**$14.95**

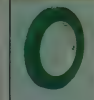
TECHNI-TOOL Masking Tape

Anti-Static High-Temp Masking Tape

For low static charge applications. Perfect for wave soldering, withstands 275°F exposure up to 45 min. **Specs:** Backing: Anti-Static co-polymer; Adhesive: Rubber; Thickness: 7 MIL; Length: 60 Yards. **(USA)**

No. 758ST350 1/2"W ....**$4.80** **No. 758ST113** 1"W....**$6.52**
No. 758ST430 3/4"W ....**$5.80** **No. 758ST132** 2"W....**$11.00**

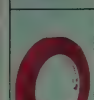
Circuit Board Fabrication Tapes



3M 851 Polyester Fabrication Tape

Green polyester/S/R blend tape for circuit board fabrication and silicone plating. Temp. Range: 40°-170°F. 72 yd roll. 3.1 MIL. **(USA)**

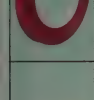
No. 105SO5811 3/4"* .....$35.26 **No. 105ST851** 1-1/2" $33.06
No. 105ST815 1" .....$22.05 **144 Yards Long*



3M Scotch™ 1280 Premium Circuit Plating Tape

Red transparent film with a special, extra-heavy adhesive that provides a superior, straight stop-off line for gold contacts on printed circuit boards. Undercutting and leak are reduced. Temp. range: 40°F to 170°F. 72 yard roll. 3.3 MIL. **(USA)**

No. 105PR280 1/2" .....$10.48 **No. 105PR2801** 1" $17.49
No. 105PR128 3/4" .....$14.50 **No. 105PR1280** 2".....$34.93



3M Scotch® 5414 Water Soluble Wave Solder Tape

Transparent PVA/synthetic tape is water soluble and masks gold finger areas of printed circuit boards during wave soldering. Dissolves completely away during typical in-line aqueous cleaning operations. Biodegradable and pH neutral. Packaged in moisture-impervious foil bag. Temperatures range: 0°F to 500°F. 36 yard roll. 1.3 MIL. **(USA)**

No. 105PR5414 1/2" .....$29.25 **No. 105ST514** 1" $61.40
No. 105AD414 3/4" $47.40

Copper Foil Tape

Techni-Tool Copper Foil Conductive Tape

For a variety of EMI/RFI shielding applications. Use as an add-on for plating bars and gold fingers. Comes with liner for easy die cutting. **Specs:** Backing Material: 1 oz. roll copper foil; Adhesive: Conductive acrylic; Thickness: 3.5 MIL; Tensile Strength: 35 lbs.; Electrical Resistance: 0.005Ω/in sq.; Operating Temperature: 155°C; Length: 36 Yards. **(USA)**

No. 758ST1436 1/4" .....$15.09 **No. 758ST3436** 3/4" $40.01
No. 758ST1236 1/2" .....$30.13 **No. 758ST8136** 1".....$50.11

3M

3M EMI Shielding Foil Tape Kit - 8 Rolls

Contains eight rolls: aluminum smooth; copper smooth; copper (adhesive both sides); tinned smooth copper; copper (non-conductive adhesive); embossed copper; embossed aluminum; and embossed tinned copper. Each is 3/4" wide x 4 yds. long. Compact dispenser box serves as a desktop reference with basic technical information on each tape including product number, backing and adhesive type, thickness, adhesion, resistance & shielding effectiveness.
No. 780ST010 Kit.....$53.50

1170 Aluminum backing foil EMI tape
No. 105ST1170 1" x 18 yds. $60.25

1181 Copper backing foil EMI tape
No. 105ST1181 1" x 18 yds. $40.99

1182 Copper backing double coated foil EMI tape
No. 105ST1182 1" x 18 yds. $47.75

1183 Tin-plated copper backing foil EMI tape
No. 105ST1183 1" x 18 yds. $41.21

1194 Copper backing foil EMI tape
No. 105ST1194 1" x 36 yds. $37.24

1245 Embossed copper backing foil EMI tape
No. 105ST1245 1" x 18 yds. $34.00

1267 Aluminum backing foil EMI tape
No. 105ST1267 1" x 18 yds. $36.04

1345 Tin-plated copper backing foil EMI tape
No. 105PR345 1" x 18 yds. $38.17

Quantity Discounts Available on most items.
Ask your representative for a quote when you call.

TECHNI-TOOL

Electronic Tape Dispenser

- Automatically advance and cut tape to increase productivity in medium production facilities
- Digital length adjustment
- 3" (76mm) core
- Adjustable feed to help prevent tape curling
- Photocell actuated or manual feed mechanism and cut
- Flame retardant antistatic cabinet

Electronic Tape Dispenser
Tape width: .28" to 2" (7 to 50.8 mm)
Cut length: .79" to 39" (20 to 999 mm)
No. 758IE1010.....$720.00

ASG Products for Assembly

EZ-8000 Compact Carousel Tape Dispenser

Cuts tape and places it on carousel at the push of a button; Provides consistent lengths from .354" to 2.402"; Auto feed; Bobbin-free design; Accommodates any size core; .12" to .984" tape width, Easy to adjust tape length and spacing; Accepts most types of tape including filament, polyimide, acetate cloth, glass cloth, polyethylene, Teflon®, paper, craft, OPP and more.
No. 106IE6132.....$868.00

ASG Products for Assembly

EZ-9000 Compact Tape Dispenser

Features: Designed for industrial or commercial use; Presents a piece of tape cut to your precise length; Small size makes it easy to accommodate on the workbench or assembly station; Reduces operator fatigue while increasing productivity; Accommodates any size roll without using Bobbin - uses Flexible Tape Support; Cuts Protection Film, Aluminum Foil, Copper Foil, Insulation material and more; Memory Function - can set 6 different lengths before use; Safety Function and design; Dual Photo Sensor; LED provides machine status; Built-in tweezers, oil and separator for easy use. Can cut adhesive and non-adhesive tape/film. Cuts two roll at one time without using bobbin.
Specs: Cuts .236 to 2.36: width and .169 to 39" lengths. Maximum tape roll diameter: 11.81". 120V.
No. 106IE135.....$852.50

START

Manual Tape Dispensers for Pressure Sensitive Tape

Advance tape consistently with one pull of the hand lever, then cut on the serrated blade. Easy adjustable setting for various predetermined lengths. Also features a removable blade holder for easy tape loading and a heavy case for stability. Both models include a 3" core.

Model	ZCM0300
TT No.	736IE0300
Applications	Thin tapes like paper, cellophane, mylar, polyester and polyimide
Tape width	.47 to 1.00" (1.2 to 25.4mm)
Cut length	.50 to 4.00" (1.27 to 102mm)
Max. outside dia./roll	4.50" (115mm)
Core diameter	3" (25 & 76mm)
Dimensions inch / (cm)	6.25"L x 3.5"W x 4.88"H (15.9L x 8.9W x 12.4H)
PRICE	$49.00

PANAVISE® Complete Sets

All Purpose Vise - Model 301

The PanaVise Model 301 tilts, turns & rotates. This general purpose vise includes the Standard Base Model 300 and Model 303 Head with satin-finish, nylon jaws. One convenient control knob locks work in any position.
No. 620PO012 .....$47.98

PV Jr. Mini Vise - Model 201

Tilt. Turn. Rotate. A vise for small projects. Hold and work through three planes. Thermo-composite jaws open to 2-7/8" (7.3 cm). Head: Rotates 360°; Swivels 360°; Pivots 210°; and fits all PanaVise base mounts.
No. 620PO201 .....$26.86

Multi-Purpose Work Center - Model 350

Economical and convenient, this unit will find a million and one uses on your workbench. (Combination of No. 620PO082, 620PO010, & 620PO026.)
No. 620PO072 .....$91.18

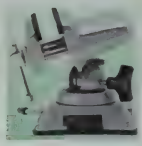
Wide Opening Vise - Model 396

Holds electrical and electronic products in any position. Model 396 is a combination of the 366 wide opening head and the 300 standard vise base. Each full turn of the insulated handle permits micro-adjustments to the exact pressure required.
No. 620PO090 .....$62.38

Electronic Work Center - Model 324

A complete and economical work bench combination. All parts, tooling, wire, soldering iron and PC boards are located exactly where you want them, to create a sturdy, stable work station. (Combines No. 620PO028, 620PO010, 620PO026, and 620PO080 Solder Station.)
No. 620PO050 .....$88.30

Vacuum Base Vise - Model 381



PanaVise 381 Vacuum Base combines with the Model 303 Standard PanaVise to add portability. A half turn of the mounting lever attaches & releases the power suction pad to allow set-ups in any location with smooth non-porous surfaces.
No. 620PO086 .....$67.18

Portable Vacuum Base Vise - Model 209

Lightweight, portable vise firmly attaches to any flat, non-porous surface. Single knob locks head into position, second knob locks arm at selected angle. Holds up to 3 pounds in grooved jaws. Head moves through three planes, 210° tilt, 360° turn and 360° rotation. Jaws 2" tall, 1" wide and opens to 2.875". ***Lifetime Warranty.*** *(Pad not included in warranty)* **(USA)**
No. 620IE209 .....$31.66

Rapid Assembly Circuit Board Holder - Model 333

Eight-position, rotating adjustment and six positive-lock positions in the vertical plane. Cross bars available up to 30" long, 12" bar standard to hold circuit boards up to 28" wide. Spring-loaded, tilt- angle adjustment, height adjustment and quick board rotation.
No. 620PO056 .....$86.38

PANAVISE® Heads/Holders

Standard Head - Model 303

This rugged head opens 2-1/4". It has non-conductive, satin-finish, nylon jaws for increased grip and gentle strength. Fits all PanaVise Bases.
No. 620PO014.....$26.86

Wide Opening Head - Model 366

Opens a full six inches. Reversible neoprene jaws have molded grooves for firmly holding p.c. boards, and when reversed, the wide "V" configuration securely holds cylindrical objects.
No. 620PO078 .....$41.26

Circuit Board Holder - Model 315

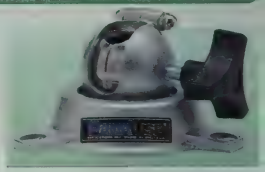
Crossbar holds p.c. boards from 1/8" to 12". A second set of "V" grooves is positioned laterally near the tip of the 6" arms.
No. 620PO028.....$34.54
Replacement arms
No. 620AC316 .....$19.18

Self Centering Extra Wide Opening Head - Model 376

Double-action jaws provide fast opening, closing and support of heavy loads. Opens a full 9". Ribbed on one side & "V" grooved on the other, reversible jaw pads. Fits all of the Series 300 bases.
No. 620PO082 .....$52.78

PANAVISE® Bases

Low Profile Base - Model 305



Has all the features of the Standard PanaVise Base. Only 2-1/2" high, designed for working close to the bench surface and with its straight side, can be mounted adjacent to the edge of a bench. Three holes in base are for permanent mounting or attachment to a Base Mount.
No. 620PO018.....$23.98

Standard Panavise Base - Model 300

Holds all PanaVise Heads & p.c. board holders. Variable load control knob & exclusive splitball feature have a range of tension which permits moving work to any position. A slight additional turn locks the head firmly in place.
No. 620PO010 .....$23.98

Vacuum Base - Model 380

Attaches instantly with a firm grip, without marring, to smooth nonporous surfaces such as smooth formica tables, porcelain or stainless steel counters. A flip of the lever attaches and releases suction pad.
No. 620PO084 .....$38.38

Bench Clamp Base Mount - Model 311

Provides portable mounting. Clamps to bench or table.
No. 620PO024.....$47.98

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.
We reserve the right to correct misprints.

Vise Accessories

PANAVISE® Accessories For Models 300, 305, 366 & 376

Weighted Base Mount - Model 308
This mount is drilled & tapped for stable portability. The 5 lbs. cast iron mount has non-marring, anti-skid feet. Screws included.
No. 620PO020 .....$28.78

Tray Base Mount - Model 312
Holds either base securely. Six individual trays to hold small parts and tools separately. Wide 8-1/4" diameter tray catches dropped parts. Slip resistant neoprene feet give additional stability.
No. 620PO026 .....$21.10

Wire Manager - Model 358
Organize your task when working with multiple wire leads. The Wire Manager slides easily onto PanaVise heads. (For 366/376 vises)
No. 620PR358.....$21.10

6" Vise
0 to 6-1/2" grip range.
Reversible: 1-1/2" x 2" jaw pads.
No. 510IE011.....$63.75

3" Vise
0 to 2-1/2" grip range.
Reversible: 1" x 1-1/2" jaw pads.
No. 510IE010.....$56.10

Jaw Pads
For No. 876PR030 & 876PR032 - Neoprene.
No. 510IE151 .....$6.80

Clamp Base and Work Positioner
For 5/8" to 2" bench thickness.
No. 510IE021.....$90.10

Round Base & Work Positioner
Freestanding, or bolts to the bench. Has a 6" cast iron base.
No. 510IE022 .....$73.55

Delta Base
Heavy cast iron. Three contact points, nonskid feet and shaped work area. (Incl. positioner 510IE020).
No. 510IE024 .....$76.50

Bench Mounted Work Positioner
A preload ball joint holds its position unlocked. Horizontal movement of the handle locks the joint in position.
No. 510IE020.....$54.85

Vacuum Vises

Multi-Angle Swivel-Action Vacu-Vise
Swivels 360° and tilts 90° to desired angle. 2.8" metal jaws open to 2.7". Equipped with slide-on rubber jaws for fragile work. 6-1/4" triangular base.
No. 402PO012.....$54.00
No. 402PO016 Slide-on Rubber Jaws $1.55

Mini Vacu-Vise
No screws. Lever-operated suction cup holds tightly and instantly on non-porous smooth surfaces such as glass, metal or laminated surfaces such as Formica. Max opening: 1-1/4".
No. 890PR216 .....$10.70

X-tra Hands
With Magnifier
2X Magnification and holds work firmly in any position to leave hands free. Double-ball joints for adjustments at any angle.
No. 890PR234 .....$17.72
X-tra Hand
Same as No. 890PR234 but without Magnifier.
No. 890PR230 .....$14.66
Single Arm Without Magnifier
Holds work firmly in any position leaving hands free.
No. 890PR228 .....$15.60

Clamps

IRWIN

A. One-handed Micro Bar Clamps

Clamp converts to a spreader by reversing the clamp posts. 4-1/4" clamping capacity; 8" spread capacity; 1-3/16" throat depth.
Single Clamp
No. 644IE006.....$11.69
Clamp
No. 644IE0062 .....$23.37/2 Pk.

Bar Clamp/Spreader!

B. Quick Change Quick-Grip®

Trigger allows you to position padded clamps anywhere on the bar and quickly change from clamp to spreader. 12" (300mm) jaw opening, 7-1/2" to 20-5/8" (195mm to 515mm) spread
No. 644IE512 .....$28.58

18" (455mm) jaw opening, 7-1/2" to 26-5/8" (195mm to 665mm) spread
No. 644IE518 .....$30.72

Mini Bar Clamp!

Quick-Grip®

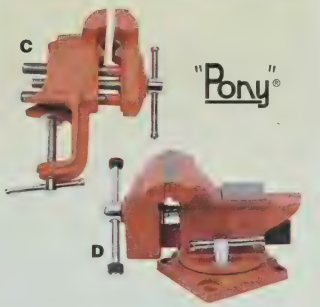
Instantly adjustable clamping pressure with Quick-Release™ trigger that lets go in a snap. 6"/150mm jaw opening, 1-1/2" jaw depth
No. 644PO546 .....$18.54

C. PONY® Light-Duty Clamp-On Vise

Designed for light-duty shop and professional use, this vise is fully portable and mounts easily and securely on edges up to 2" thick. Plated-steel double guide-bars allow smooth operation. 3" jaw width with 2-1/2" max. opening. (China)
No. 114PO025 .....$19.50

D. PONY® Light-Duty Bench Vise with Swivel Base

Features square four-hole swivel base, sturdy steel jaw faces, ground and polished anvil, permanent pipe jaws and forming horn. Vise swivels minimum of 270° on the base. 3-1/2" jaw width with 3" max. opening capacity. (China)
No. 114PO530.....$27.40



Yamato Digital Convection Ovens

- Microprocessor controlled temperature
- Large LED display and keypad make it easy to program temperature settings
- Calibration functions (auto-tune, calibration offset and zero-span calibration) significantly minimize overshoot and undershoot
- Self-diagnostic circuitry with audible/visual alarms and automatic shut-off with abnormality is sensed in temperature sensor, triac, heater or fan motor (digital ovens)
- Independent overheat protection device for added safety
- Corrosion resistant Type 304 (18-8) Stainless Steel interior
- Cold rolled carbon steel exterior finished with baked melamine resin for durability
- Two-inch rock wool insulation in walls and push-button door (Japan)
- ***One-Year Limited Warranty (Additional 3 months if registered through website)***

960SO302

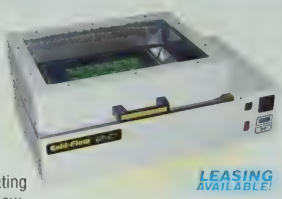
New!
960SO005

960SO405

New!
960SO912

Model No.	DX-302	DX-402	DX-600	DVS402	DVS602	DNK402	DNK602	DKN812	DKN912
TT No.	960SO302	960SO402	960SO006	960SO005	960SO607	960SO405	960SO602	960SO812	960SO912
Type	Gravity Convection			Natural Convection		Forced Convection			
Programmable	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Operating Temp. Range	Ambient +5°C to 300°C			Ambient +5°C to 260°C		Room temperature +10°C to 260°C			
Time to reach max. temp	Approx. 45 min.	Approx. 60 min.	Approx. 80 min.	Approx. 90 min	Approx. 90 min	Approx. 90 min.	Approx. 80 min	Approx. 80 min	Approx. 80 min
Chamber Size	0.9 cu. ft.	2.61 cu. ft.	5.4 cu. ft.	3.5 cu. ft.	5.72 cu. ft.	3.2 cu ft.	5.3 cu. ft.	10.6 cu. ft	18.9 cu. ft
Shelves/Supports Included	2	2	2	2	2	2	2	4	4
Maximum Shelves	6	9	12	9	12	9	12	29	29 x 2
External Dimensions WxDxH	15.7" x 17.3" x 24.8"	21.6" x 21.2" x 28.7"	27.6" x 25.2" x 32.7"	22" x 23.7" x 32.3"	28" x 25.6" x 34.3"	22" x 24" x 32.3"	28" x 25.6" x 34.25"	28" x 25.6" x 24"	46.5" x 25.6" x 63.6"
Additional Features	One preset temperature can be stored in memory		Fixed temperature operation. Program operation (3 pattern), auto start, quick auto stop. Pattern repeat. Calibration offset, key-lock, power failure compensation.						
PRICE	$1,096.00	$1,339.00	$1,951.50	$1,709.00	$2,106.00	$2,125.25	$2,435.00	$4,700.00	$10,471.00

GF-C2 Dual Function Hot Plate or Batch Oven

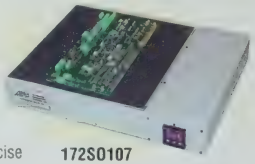


LEASING AVAILABLE!

This conduction/convection oven has a unique dual function use - both as a hot plate or as a forced air convection oven. **Features:** Large heating area of 13" x 13". Large viewing window allows you to see the entire product and process. Can be used as both a batch oven or a hot plate. 3/4" thick heat plate with abrasion resistant Teflon® coating. Digital controller precisely and automatically regulates temperatures. Combination forced air convection/conduction heating for consistent process control. Nitrogen gas inerting option.

No. 172SO100 Conduction/Convection Oven **$3,850.00**

Single and Dual Function Hot Plates


172SO107

These **Gold-Flow™** hot plates include: a large heating area of 13" x 13"; 3/4" aluminum heat plates with abrasion resistant Teflon® coating for precise even heating. Operating temp range of 100° to 500°F (37° to 260°C); Microprocessor based digital controller precisely and automatically regulates temperature. Fully insulated for safe operator use. The dual plate model features independent accurate control monitoring of both plates. Can be used for various preheat, rework and reflow applications. 18.75" x 14" x 4" high.

No. 172SO106 Dual Hot Plate Preheat System.....**$1,700.00**

No. 172SO107 Single Hot Plate Preheat System **$1,200.00**

LEASING AVAILABLE!

Zephyrtronics™

ZT-1 Digital AirBath™ Pre-Heat System

Terrific for low volume production PCB work, prototyping, and/or rework. The convenient microprocessor control permits temperature selection with an easy-to-use "set/read" digital display function with time/temp ramp profiling. The Airbath™ is most helpful for preheating troublesome ceramic, multi-layer and heavy ground plane circuit assemblies. Fully portable, the Airbath™ makes achieving the same low thermal profiles found in high end production machines easy. The intelligent solution to stop burning up your printed circuit board assemblies, prevent thermal degradation and shock, lifting of pads and traces, substrate delamination board, measling and warping. **Specs:** Air volume: 24CFM; Temp control: Closed loop sensing with programmable set/read & ramp; Temp setting: a) ambient fanning, b) variable digital temp; Power: 120VAC/60Hz/5A; Air supply: Self-contained. **(USA)**

No. 901SO111 Digital airbath....**$1,399.00**

ZT-1 AirBath™ Pre Heat System

No. 901SO201 Analog airbath ..**$1,000.00**

LEASING AVAILABLE!

Thermolyne Hot Plate

Embedded heating elements heat fast. Demand-type thermostat control. Aluminum top plate temperature range 100° to 700°F (38° to 371°C) Superior temperature stability of ±1.1°C from 100° to 371°C. Stainless steel, ventilated case. 50/60 cycles, 120V, 6.2 amps, 750W.

No. 778MI030.....**$275.95**

TECHNI-TOOL®

SHIPPED BY GROUND! NO HAZ-MAT CHARGE!

A/B. Tech Duster "O"® Inert Dusting Gas

Safely removes dust, dirt, oxide particles and other dry contaminants from delicate instruments. The high-pressure spray reaches the most inaccessible areas to remove dust instantly without residue. Will not scratch or abrade sensitive surfaces. Leaves no residual film. Moisture-free, non-toxic, non-corrosive, non-flammable, inert dusting gas is completely safe to use with all materials. Zero ozone depletion, No CFC's-No HCFC's! Contains-HFC (134A). Safe Pressure-81 PSI pressure. *Meets Federal specs BB- F-1421.* Filtered to 0.3 microns.

10 oz. Disposable Can & Nozzle
A. No. 758OZ134 .....(1-11) **$7.35** (12+) **$6.98/Ea.**

15 oz. Disposable Can & Nozzle
B. No. 758OZ153 .....(1-11) **$9.90** (12+) **$9.41/Ea.**

Tech Duster "O"® System
Includes: 1 chrome valve nozzle and 1-10 oz. can of Tech Duster "O".
C. No. 758OZ140 .....(1-11) **$42.05** (12+) **$39.95/Ea.**
Refill Can Only for Tech Duster "O"® System
No. 758OZ137 .....(1-11) **$7.90** (12+) **$7.51/Ea.**
Replacement chrome valve for Tech Duster "O"® System
No. 754AC928 .....(1-11) **$37.64** (12+) **$35.76/Ea.**

D. Big Blast™ Tech Duster "O"® High Velocity Dusting Gas

Exceptionally pure, moisture free, inert dusting gas. This high velocity dusting gas removes particles without the use of harmful solvents. Designed to remove microscopic contaminants and dust particles from all types of electronic equipment. Use where short blasts of large volumes of air are required. Quad filtered, non-flammable, non-ozone depleting and leaves no residue. **Specs:** Chemical Components: 1, 1, 1, 2-Tetrafluoroethane; Technical Data: Flash Point: None; Ozone Depletion Potential: 0; Vapor Pressure: 81psi g @ 25.C; Non-Exempt Volatile Organic Compounds (VOCs):0 g/l. Filtered to 0.3 microns. 10 oz. **(USA)**

No. 758CH697 .....(1-11) **$10.95** (12+) **$10.40/Ea.**

Isopropyl Alcohol

Versatile general purpose cleaner for many hand-cleaning situations. Surprisingly strong cleaner compared to competing brands. Easily removes light oils, grease, fingerprints, and the organic and ionic contamination found in fluxes. Mild enough for electronic and mechanical assemblies, stencils, ceramics, glass and plastics. Also cleans soft plastics, flexible belts and the recording heads in VCRs. Meets many military specs, including MIL-STD-2000 and WS-6536. Residue-free, rinsing not required. 16 oz. bottle.
A. No. 758CH775 .....**$5.55**

Freezer

Best Seller

Use as a troubleshooting aid for circuit board production. Chills to -62°F (-52°C) without any residue or damage to ozone. Non-flammable. 10 oz. aerosol.
B. No. 758CH1672 .....**$7.95**

Flux Remover

A highly affordable solvent for precision benchtop-level cleaning. Water-free alcohol base delivers more cleaning power than simple isopropyl alcohol. Removes most types of fluxes, including rosin, water-based, no clean and lead-free fluxes. A versatile cleaner, it also can remove light oils and grease, some inks, and adhesives. Can be used on electronic and mechanical assemblies, plastics and rubber. Dries relatively slowly, leaves no residues, rinsing is never required. 12 oz. aerosol.
C. No. 758CH752 .....**$7.95**

Non-flammable Defluxer

The industry's most powerful benchtop defluxer. Exceptional performance on rosin, synthetic and no clean fluxes, including high temperature lead-free materials. Quickly dissolves all types of contamination, including corrosive ionic deposits, and removes both polar and non-polar contamination. Highly suitable for all types of electronics, including thru-hole boards, SMT designs, hybrids and connectors. Non-flammable, ESD safe, low aroma, non-corrosive, ozone safe and residue free. Excellent materials compatibility. Testing on soft plastics is recommended. 12 oz. aerosol.
D. No. 758CH763 .....**$13.75**

Contact Cleaner

A mild precision cleaner for light rinsing of electrical and electronics devices. Designed to flush away contamination more than dissolve it, this cleaner can gently remove light grease, oils, dust and lint, some fingerprints and light coatings of organic and inorganic contamination. Can be used on electronic assemblies, electrical connectors and devices, mechanical parts, plastics and rubber. Cleans soft plastics, flexible belts and the recording heads on VCRs. Dries relatively slowly but leaves no residue, so it's safe to use in hard-to-reach places. Flammable - allow all components to dry thoroughly. 12 oz. aerosol can.
E. No. 758CH741 .....**$8.95**

Non-Ozone Depleting & Zero Residue!

141 ℓ FREE!

Electro-Cleaner Electronics Cleaner

For light duty cleaning of electronic and electrical equipment, machinery and metal parts. Non-ozone depleting cleaner is non-corrosive and safe on plastics. Evaporates quickly, leaves no residue. 10 oz. aerosol.
F. No. 758CH1620 .....**$7.25**

COMPARE AND SAVE!
TASK WIPES

SEE PAGE 72 FOR TECHNI-TOOL LIGHT-WEIGHT GENERAL TASK WIPES!

Dusters

Ozone safe, CFC, HCFC Free! Use dusters to remove dust, dirt and other dry contaminants from all kinds of surfaces. These dusters are safe on plastics, non-flammable and leave no residue.

Chemtronics

UltraJet® 70
Economical duster. 100% ultra-pure HFC-134a. Leaves no residue. 10 oz. Aerosol.
No. 237AE1015 .....$10.61

UltraJet® All-Way
All-Way can be sprayed in any direction without the risk of dispensing a liquid spray. 100% pure HFC-134A. 8 oz. Aerosol.
No. 237CH620 .....$12.66

Ultrajet®
High-pressure duster removes dirt, dust, and dry contaminants without scratching delicate surfaces. Ozone safe, nonflammable, CFC and HCFC free, may be used on energized equipment. **(USA)**
No. 2370Z020 10 oz. Aerosol **.....$14.57**

UltraJet® Duster System
Includes chrome trigger valve, 36" extension hose and refill can.
No. 2370Z1020 .....$37.91
No. 237AE1275 10 oz. refill can **..$13.85**

Duster
Economical, regular strength. Ozone safe, CFC/HCFC free. Made of HFC-134a.
No. 237CH217 8 oz. **.....$7.84**
No. 237CH1617 12 oz. **.....$11.67**

Chrome Trigger Valve
Rigid, 4" stainless steel trigger valve for: Ultrajet® Refill, part number 237AE1275.
No. 237PR710.....$29.74

Chemtronics

Chemtronics 152a Dusters
HFC-152a-based duster quickly removes light dust and debris. For use on powered-down, de-energized connectors, contacts and relays. Residue free, won't scratch delicate surfaces. Contains no ozone depleting compounds. **Flammable.** 10 oz. Aerosol.

152a Regular strength duster
No. 237CH1027 .....$6.93

152a Blast™ Extra strength duster
No. 237CH1029 .....$8.18

Chemtronics

Freez-It®
Pin-point accuracy spray quickly cools surfaces below -60°F, to locate thermal intermittent components, and test PC boards for trace continuity. Provides heat sink protection to components during soldering and desoldering operations. Effectively freezes adhesives for quick removal.
No. 2370Z1050 10 oz. Aerosol $15.20
No. 2370Z550 15 oz. Aerosol.....$21.67

Chemtronics

Freez-It® Antistat
The high-performance, pinpoint accurate freeze spray that safely cools individual static-sensitive components below -60°F. Non-frosting. Safe on plastics, nonflammable, ozone safe, and CFC/HCFC free. 10 oz. aerosol. **(USA)**
No. 237PR105.....$15.51

TECHSPRAY

Techspray Duster
RoHS Compliant

Economical choice to remove dry contaminants from sensitive components and surfaces. Non-ozone depleting, non-flammable dusting gas. Choose the refill can if you currently use chrome trigger valve. Choose the disposable can and nozzle, or choose the trigger valve to recycle. **(USA)**

Best Seller

Disposable Can & Nozzle 10 oz.
No. 7540Z671 .....$9.35
Disposable Can & Nozzle, 15 oz.
No. 754CH671 .....$12.92
Refill Can 10 oz.
No. 754CH167 .....$9.87
Reusable chrome trigger valve for use with 754CH167.
No. 754AC928 .....$37.64

20% Lower Price per Can! For use when flammability is not an issue!

Economy Duster
HFC-152a based economy duster has 32% more sprays at 20% less cost than regular 10 oz. can. All the blasting power you need for quick dust removal. Flammable. 10 oz. aerosol can.
No. 754CH673.....$6.50

Vortex™ Duster
High velocity duster with pure, moisture free, inert gas for dislodging dust from hard-to-reach areas. 100% HFC-134a, non-flammable, safe on plastics, non-ozone depleting. Vortex™ 360° Duster may be used in any position without expelling liquid. **(USA)**

Vortex™ Duster 10 oz.
No. 754CH697.....$13.82

Vortex™ 360° Duster 8 oz.
No. 754CH169.....$12.05

TECHSPRAY

Techspray Freezer
RoHS Compliant

A rapidly evaporating liquid that chills to -62°F. Use for troubleshooting intermittent faulting capacitors, resistors, semi-conductors, etc. Prevent cold solder joints; **Features:** 100% HFC-134a, non-flammable, non-conductive. Leaves no residue.
10 oz. Aerosol
No. 7540Z672.....$10.42
15 oz. Aerosol
No. 754CH276.....$14.34

Techspray Anti-Static Freezer
RoHS Compliant

Rapidly evaporating liquid that chills to -40°F and does not generate a static charge that can damage sensitive components. Use for troubleshooting for intermittently faulting capacitors, resistors, semi-conductors and other defective components. Prevents cold solder joints; protects heat-sensitive components during soldering. Non-flammable. Leaves no residue. **(USA)**
10 oz. Aerosol
No. 754AE747 .....$13.43
15 oz. Aerosol
No. 754CH471 .....$18.45

MicroCare

Micro·Freeze™ Circuit Chiller
Use to locate intermittent faults in components. Chills to lower than -45°C in seconds. Ozone-safe and nonflammable. 10 oz. aerosol.
No. 565CH006.....$9.21

MicroCare

Anti-Stat Micro·Freeze™
Ozone-safe. ESD-safe freeze spray. Chills to lower than -45°C in seconds. 10 oz. aerosol.
No. 565CH008 .....$9.21

MicroCare

Micro·Blast™ Canned Air
Ozone-safe, non-toxic, nonflammable dry circuit cleaner. Convenient trigger spray extends can life. 10 oz. aerosol.
No. 565CH007.....$9.21

Chemtronics

Chemtronics® complete line of high purity solvents are the finest, most effective products made for the critical cleaning and degreasing of electronics, electrical assemblies and sensitive components. Each cleaning agent process unique properties suited to specific applications – from precision cleaning of solvent sensitive components to heavy duty degreasing of electrical equipment.

Cleaner/Degreasers

Electro-Wash® Cleaner Degreasers are engineered to clean a wide variety of soil, oil, grease, oxides and handling contamination, from equipment to assemblies that include:

- Metal & fiber optic cable splices
- Motors & transformers
- Programmable Logic Controllers (PLCs)
- Tools
- Pneumatic & hydraulic assemblies
- Control systems
- Electronics and electrical equipment
- Precision devices
- Meters/measurement devices
- Screens and stencils
- Printed circuit boards

ELECTRO-WASH Features	CZ	NXO	PX	MX	PN	NX	NR
Plastic Safety	Yes	No	Yes	Yes	Yes	No	No
Flammable	No	No	Yes	Yes	No	No	No
Cleaning Strength	Regular	Extra	Extra	Extra	Regular	Extra	Regular
Ozone Safe	Yes	Yes	Yes	Yes	No	No	Yes
HCFC-225	No	No	No	No	Yes	Yes	No
Dries Fast	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cleaning Ability							
Greases	Good	Best	Best	Best	Good	Better	Best
Oils	Better	Best	Best	Best	Better	Best	Best
Ionic Soils	Better	Better	Best	Best	Good	Better	No
Cleaning Methods							
Aerosol Spray	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Benchtop System	Yes	Yes	Yes	No	No	Yes	Yes
Vapor Degreasing	Yes	Yes	No	No	No	No	No
Ultrasonics	Yes	Yes	No	No	No	Yes	Yes
Hot Immersion	No	No	No	No	No	No	Yes
Cold Immersion	Yes	Yes	Yes	No	No	Yes	Yes
TT No.	**237CH7100**	**237CH607**	**237OZ210**	**237CH1621**	**237CH1678**	**237CH1611**	**237CH1614**
Size (Aerosol)	**12 oz.**	**12 oz.**	**12.5 oz.**	**10 oz.**	**12 oz.**	**12 oz.**	**12 oz.**
PRICE	**$43.49**	**$43.75**	**$20.28**	**$18.88**	**$33.67**	**$27.21**	**$15.99**
TT No.	**237CH101**	**237CH107**	**237CH110**	**–**	**–**	**237CH1111**	**237CH1114**
Size (Liquid)	**Gallon**	**Gallon**	**Gallon**	**–**	**–**	**Gallon**	**Gallon**
PRICE	**$539.73**	**$554.81**	**$67.95**	**–**	**–**	**$374.25**	**$137.22**

TECHSPRAY

Cleaners/Degreasers

Clean oil and contaminants off of metal parts, printed circuit boards, barcode instruments, switch boxes, label boxes and engines.

Ecoline - Very strong cleaner, economical but flammable.

G3 - Very strong, non-flammable cleaner.

Blue Shower II - High precision, non-flammable plastic safe cleaner.

Features	1620 Ecoline Blue Shower Maintenance Cleaner	1630 Blue Shower G3	1637 Universal Cleaner G3	1635 G3 Industrial Maintenance Cleaner	1667 Blue Shower II
Flammable	Yes	No	No	No	No
Flash Point	22°F	None	None	38°F	None
Cleaning Strength	Best	Best	Best	Best	Good
Plastic Safe	Best	Better	Better	Good	Best
Ozone Safe	Yes	Yes	No	Yes	No
VOC (EPA)	75%wt	61%wt	68%wt	69%wt	9%wt
Toxicity (TLV)	200 ppm	200 ppm	50 ppm	200 ppm	50 ppm
Residue-Free	Yes	Yes	Yes	Yes	Yes
Cleaning Methods:					
Vapor Degreasing	No	No	No	No	No
Ultrasonics	Yes	No	Yes	No	Yes
Specially for	Low cost, strong cleaner	Non-flammable, strong cleaner	Non-flammable, strong cleaner	Low cost, non-flammable, strong cleaner	Non-flammable, sensitive plastics, low VOC
Size	**10 oz. Aerosol**	**10 oz. Aerosol**	**1 Gallon**	**20 oz. Aerosol**	**8 oz. Aerosol**
TT No.	**754CH620**	**754CH3010**	**754CH637**	**754CH1635**	**754CH678**
PRICE	**$11.18**	**$16.39**	**$219.64**	**$19.33**	**$16.91**
Size	**13 oz. Aerosol**	**16 oz. Aerosol**	**5 Gallon**	**–**	**18 oz. Aerosol**
TT No.	**754CH626**	**754CH1630**	**754CH635**		**754CH667**
PRICE	**$12.31**	**$20.61**	**$844.77**		**$32.00**

Chemtronics Contact Cleaners

Recommended for every phase of electronics and electrical contact maintenance including:

- Metal contacts, Relays and switches
- Plastic embedded contacts
- Potentiometers
- Circuit breakers & Fuse blocks
- Electronic controls & Electrical panels
- Motors and armatures
- Plugs and sockets
- Solenoids

POW-R-WASH™ Features	CZ	VZ	NX	PN (Great Seller)	NR	Cable Cleaner	Kontact Restorer®
Plastic Safe	Yes	No	No	Yes	No	Yes	No
Flammable	No	No	No	No	No	Yes	No
Cleaning Strength	Regular	Regular	Extra	Regular	Regular	Extra	Extra
Ozone Safe	Yes	Yes	No	No	Yes	Yes	Yes
HCFC-225	No	No	Yes	Yes	No	No	No
Dries Fast	Yes	Yes	Yes	Yes	Yes	No	Yes
Benefits							
Use on live circuits	Yes	Yes	Yes	Yes	Yes	No	Yes
Dielectric Breakdown	31kV	15kV	30kV	26kV	23kV	62kV	23kV
Specially for:	Sensitive Plastic	General Contact Cleaning	Cleaning Metal Contacts	Cleaning Plastic Encased Contacts	Cleaning Heavy Lubrication From Live Circuits	Cleaning Cables, Tools & Contacts	Lubricates Tin and Copper Connectors
TT No.	**237CH7300**	**237CH6300**	**237CH1612**	**237CH167**	**237CH1613**	**237CH2425**	**237CH1629**
Size (Aerosol)	**12 oz.**	**12 oz.**	**12 oz.**	**12 oz.**	**12 oz.**	**13.5 oz.**	**12 oz.**
PRICE	**$44.99**	**$18.68**	**$28.90**	**$26.55**	**$15.64**	**$10.76**	**$21.79**

MicroCare

Ideal contact cleaner can be safely sprayed on an energized electrical circuit, rinsing away dust and grime while keeping the operator safe.

	Contact Cleaner C
Model No.	**MCC-CCC**
Primary Function	Ozone-safe, Nonflammable Contact Cleaner
About the Solvent	
Primary Ingredient	HFC
Contains Ozone-Depleting HCFC's	No
Contains n-Propyl Bromide	No
Contains Lubricant	No
Aroma	Very Slight
About How Well It Works	
Kb Value (Lower=Milder)	20
Evaporation Rate (Ether=1)	1.1
Residues after Spraying/Wiping	None
Dielectric/Conductivity	Nonconductive
Plastic-Safe	Yes
About Safety & the Environment	
Toxicity (AEL or TLV)	266
Flammable Rating	Not Flammable
Flame Extension	None
Flashpoint	None
VOC Content (Grams/Liter)	0 g/L
Ozone Safe	Yes
Commercial Items	
Mil-Spec Approved	No
TT No.	**565CH003**
Package Size	**10.5 oz. Aerosol**
PRICE	**$18.89**

TECHNI-TOOL®

Contact Cleaner

A mild precision cleaner for light rinsing of electrical and electronics devices. Designed to flush away contamination more than dissolve it, this cleaner can gently remove light grease, oils, dust, lint, some fingerprints and light coatings of organic and inorganic contamination. Can be used on electronic assemblies, electrical connectors and devices, mechanical parts, plastics and rubber. Cleans soft plastics, flexible belts and the recording heads on VCRs. Dries relatively slowly but leaves no residue. Perfect for cleaning hard-to-reach places. Flammable - allow all components to dry thoroughly. 12 oz. aerosol can.

No. 758CH741.....$8.95

TECHSPRAY

Contact Cleaners

Cleans oils and contaminants off relays, contacts and housings.

Ecoline - Very strong cleaner, economical but flammable.

G3 - Very strong cleaner, most economical non-flammable.

Contact Cleaner II - High precision cleaner, safe on plastics, non-flammable.

Features	1622 Ecoline	1632 G3	1637 G3	1668 Contact Cleaner II
Flammable	Yes	No	No	No
Flash Point	22°F	None	None	None
Cleaning Strength	Best	Best	Best	Good
Plastic Safe	Best	Better	Better	Best
Ozone Safe	Yes	Yes	No	No
VOC (EPA)	75%wt	60%wt	68%wt	0%wt
Toxicity (TLV)	200 ppm	200 ppm	50 ppm	50 ppm
Residue-Free	Yes	Yes	Yes	Yes
Benefits:				
Use on live circuits	No	No	No	No
Specially for	Low cost, strong cleaner	Non-flammable, strong cleaner	Non-flammable, strong cleaner	Non-flammable, sensitive plastics, low VOC
Size	**10 oz. Aerosol**	**10 oz. Aerosol**	**1 gallon**	**8 oz. Aerosol**
TT No	**754CH622**	**754CH3210**	**754CH637**	**754CH675**
PRICE	**$10.80**	**$16.39**	**$219.64**	**$17.71**
Size	**13 oz. Aerosol**	**16 oz. Aerosol**	**5 gallon**	**18 oz. Aerosol**
TT No	**754CH625**	**754CH1632**	**754CH635**	**754CH690**
PRICE	**$12.31**	**$20.62**	**$844.77**	**$32.94**

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.

We reserve the right to correct misprints.

CAIG LABORATORIES, INC.

DeoxIT® Connector Rejuvenator

More than a Contact Cleaner – Chemically Improves Connections without harm to metal and plastics.

Improves conductivity on ALL metal surfaces. Deoxidizes, cleans, lubricates and protects; reduces intermittents, wear, arcing and RFI.

Spray, flushing solvent (5% formula), 142g
A. No. 218AE005 (D5S-6) **$14.95**

Spray, non-flammable solvent (5% formula), 163g
B. No. 218CH905 (DN5S-6N) **$21.95**

Wipes, individual, non-flammable, 50/pk
C. No. 218CH150 (K-DIW-50) **$23.95**

Pen, 100% liquid, non-flammable, 6 mL
D. No. 218CH100 (D100P) **$16.95**

Needle, 100% liquid, non-flammable, 25 mL
E. No. 218CH102 (D100L-25C) **$24.95**

DeoxIT® GOLD, Conditioner

Maintains new system performance. Conditions and protects all plated and base metals; Prevents dendrite/fretting corrosion; Seals and protects; Reduces intermittents, wear, arcing and RFI.

Spray, flushing solvent (5% formula), 142g
F. No. 218AE056 (G5S-6) **$20.95**

Spray, non-flammable solvent, (5% formula), 163g
G. No. 218CH5151 (GN5S-6N) **$26.95**

Wipes, individual, non-flammable, 50/pk
H. No. 218CH500 (K-GIW-50) **$35.50**

Pen, 100% liquid, non-flammable, 6mL
I. No. 218CH052 (G100P) **$22.95**

Needle, 100% liquid, non-flammable, 25mL
J. No. 218OZ100 (G100L-25C) **$45.95**

DeoxIT® Survival Kits

Industrial Survival Kit
Includes: DeoxIT, DeoxIT GOLD, and DeoxIT SHIELD mini-sprays, wipes, and squeeze tubes, lint-free accessories.
K. No. 218CH130 .....**$29.95**

Computer Survival Kit
Includes: DeoxIT GOLD mini sprays, wipes, pen and squeeze tubes, lint-free accessories.
L. No. 218CH330 .....**$32.95**

DeoxIT® Precision Instrument Oiler

For rubber, plastics and metals. Temperature range -60°C to 232°C. 6ml.
No. 218CH010 .....**$7.95**

Cleaner Degreaser

NON-OZONE DEPLETING & ZERO RESIDUE!

141 b FREE!

TECHNI-TOOL

Electro-Cleaner Electronics Cleaner

For light duty cleaning of electronic and electrical equipment, machinery and metal parts. Non-ozone depleting cleaner is non-corrosive and safe on plastics. Evaporates quickly leaving no residue. 10 oz. aerosol.
No. 758CH1620 .....**$7.25**

Presaturated swabs and wipes combine highly-effective cleaners and static-dissipative treatments with the convenience of a disposable applicator.

Chemtronics

Chemswab™

Non-abrasive, urethane foam swabs presaturated with isopropyl alcohol and can be used to safely clean computer keyboards, magnetic tape devices and electronic components. Evaporates quickly with no residue or contamination.
No. 237CH025 .....**$33.81/25 swabs**

TECHSPRAY

Label and Adhesive Remover

This hydrocarbon cleaner safely removes gummy residues, labels, stickers, ink marks, beverage spills, and other contaminants. Mild cleaner; natural solvent; pleasant odor; penetrates rapidly; high flash point (111°F/43°C); low toxicity. **(USA)**
4.5 oz. aerosol
No. 754OZ613 .....**$11.25**

Best Seller

Chemtronics

Chempad™

Lint-free and non-abrasive. Evaporates completely. Residue-free, and is compatible with most plastics and rubber. 50 pads/box.
No. 237CH400 .....**$26.36**

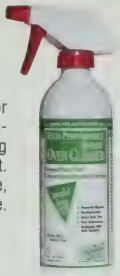
Oven Cleaners

MicroCare

Reflow Oven Cleaner

High-temperature cleaner ideal for soldering systems and for cleaning oils, grease, dirt and handling soils from electronics equipment. No HCFCs, no n-Propyl Bromide, non-flammable, not ozone-safe. Contains alcohol.

12 oz. pump bottle
No. 565CH011.....**$19.94**



TECHSPRAY

1691 Oven Cleaner

Cleans reflow ovens, wave soldering systems and heat exchanger systems by removing all types of flux residue. Use for preventive maintenance. Fast acting and more effective than IPA for baked-on flux residues. Safe for automatic finger cleaning systems. Non-flammable, low odor, low VOC and non-ozone depleting.

1 Gallon
A. No. 754CH6915 ....**$106.03**
1 Pint
B. No. 754CH6913 .....**$20.78**

Chemtronics

RoHS Compliant

Flux Removers

Flux remover is critical to insure reliable circuitry. The type of flux to be removed,solvent compatibility and ease of application are all factors to consider when choosing a flux remover. Flux removers are available in aerosol, BrushClean™ System, and liquid form for vapor degreaser, spray systems, ultrasonics, and dip tank applications. Recommended for:

- Post-solder operations
- PC boards
- Sensitive circuit components
- Component leads
- SMD pads
- Ship carriers
- Plugs, sockets and heat sinks
- Thru-hole and SMT devices
- Screens and stencils
- Work areas

*R, RMA, RA, No-Clean

JUST THE FACTS

FLUX-OFF®	CZ	Lead-Free	Solder Rosin	No-Clean	No-Clean Plus	Water Soluble	Heavy Duty	Aqueous
Features								
Plastic Safety	Yes	No	Yes	No	No	Yes	No	Yes
Flammable	No	Yes	Yes	No	Yes	Yes	No	No
Ozone Safe	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
HCFC-225	No	No	No	Yes	No	No	No	No
Dries Fast	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Residue Cleaned								
Rosin Based*	Best	Best	Best	Good	Best	Good	Best	Best
No-Clean	Good	Good	Good	Best	Best	No	Best	Good
Water Soluble	No	Good	Good	No	Good	Best	Good	Best
Remove White Residue	No	No	No	No	Yes	No	Yes	Yes
Cleaning Methods								
Aerosol Spray	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
BrushClean™ System	Yes	Yes	Yes	Yes	Yes	No	Yes	No
Hand Cleaning	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Vapor Degreasing	Yes	No	No	No	No	No	Yes	No
Ultrasonics	Yes	No	No	Yes	No	No	Yes	Yes
Immersion	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
In-Line System	No	No	No	No	No	No	No	Yes
Benchtop System	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rinsing Recommended	No	No	No	No	No	No	No	Yes
TT No.	**237CH7200**	**237CH697**	**237OZ035**	**237CH1695**	**237CH1696**	**237OZ1530**	**237CH1631**	–
Size (Aerosol)	**12 oz.**	**12 oz.**	**10 oz.**	**12 oz.**	**12 oz.**	**13.5 oz.**	**12 oz.**	–
PRICE	**$45.20**	**$17.37**	**$18.18**	**$26.20**	**$17.06**	**$15.13**	**$41.59**	–
TT No.	–	**237CH197**	**237OZ135**	–	**237CH196**	**237OZ130**	**237CH131**	**237CH132**
Size (Liquid)	–	**Gallon**	**Gallon**	–	**Gallon**	**Gallon**	**Gallon**	**Gallon**
PRICE	–	**$76.09**	**$66.39**	–	**$65.51**	**$80.05**	**$545.56**	**$39.13**
BRUSHCLEAN™ SYSTEM								
TT No.	**237CH7208**	**237CH897**	**237CH835**	**237CH895**	**237CH896**	–	–	–
Size (BrushClean)	**5 oz.**	**6 oz.**	**5 oz.**	**6 oz.**	**6 oz.**	–	–	–
PRICE	**$22.39**	**$12.46**	**$10.77**	**$17.12**	**$11.24**	–	–	–
TT No.	–	–	**237CH5301**	–	–	–	–	–
Size (BrushClean)	–	–	**10 oz.**	–	–	–	–	–
PRICE	–	–	**$18.58**	–	–	–	–	–

JNJ

Solder Paste and Flux Remover

Defluxer for R, RA and RMA type fluxes. Cleans PC boards, contacts, relays, gold fingers and most types of electronics. CFC and HCFC free. Leaves no residue. Fast evaporator. High flash point. Use concentrated or mixed with water up to 50% in ultrasonic cleaners or screen/stencil cleaning machines.

SuperSaturated SmartWipes - 100 wipes/canister
No. 501CH9101 .....**$19.75**

SmartSpray® antistatic plastic, trigger bottle - 1 pint
No. 501CH060 .....**$12.75**

1 gallon container
No. 501CH9105 .....**$38.50**

3M

Novec™ Flux Remover

Cleans rosin solder fluxes, waxes and similar contaminants. Also effective in removing hydrocarbon, silicone and fluorochemical oils and greases. Low odor and quickly evaporates, leaves no residue. Non-corrosive and compatible with most plastics, except acrylics, polycarbonates, ABS and PS. Non-flammable, contains no HFCs. Low toxicity - no nPBs or HAPs. HAZMAT hazardous materials must be shipped by ground, and are non-refundable and non-returnable. 12 oz aerosol.
No. 105CH1697.....**$21.25**

TECHNI-TOOL

Flux Remover

A highly affordable solvent for precision benchtop-level cleaning. Water-free alcohol base delivers more cleaning power than simple isopropyl alcohol. Removes most types of fluxes, including rosin fluxes, water-based fluxes, "no clean" fluxes and "lead-free" materials. A versatile cleaner, it also can remove light oils and light grease, some inks, and adhesives. Can be used on electronic and mechanical assemblies, plastics and rubber. Dries relatively slowly, leaves no residues, rinsing is never required. 12 oz. aerosol.
No. 758CH752 .....**$7.95**

Non-flammable Defluxer

The industry's most powerful benchtop defluxer. Exceptional performance on rosin, synthetic and no clean fluxes, including high temperature lead-free materials. Quickly dissolves all types of contamination, including corrosive ionic deposits, and removes both polar and non-polar contamination. Highly suitable for all types of electronics, including through-hole boards, SMT designs, hybrids and connectors. Non-flammable, ESD safe, low aroma, non-corrosive, ozone safe and residue free. Excellent materials compatibility. Testing on soft plastics is recommended. 12 oz. aerosol.
No. 758CH763.....**$13.75**

TECHSPRAY RoHS Compliant

Flux Remover

Removes no-clean and rosin based residues off of printed circuit boards in electronic repair and production.

Ecoline – Very strong cleaner, economical but flammable. 22°F flashpoint.

G3 – Very strong cleaner, most economical non-flammable.

AK225 – High precision cleaner, safe on plastics, non-flammable.

Features	1621 Ecoline	1631 G3	1634 G3 - No Clean	1638 G3 - Bulk	1660 AK225 No-Clean	1665 AK225 AMS
Cleaning Strength	Best	Best	Best	Best	good	good
Plastic Safe	Best	Better	Better	Better	Best	Best
Ozone Safe	Yes	Yes	Yes	No	No	No
VOC (EPA)	75%wt	60%wt	60%wt	70%wt	33%wt	5-6%wt
Toxicity (TLV)	200 ppm	200 ppm	200 ppm	50 ppm	50ppm	50ppm
Residue-Free	Yes	Yes	Yes	Yes	Yes	Yes
Residues Cleaned:						
Rosin Based	Best	Best	Better	Best	Better	Best
No-Clean	Better	Better	Best	Best	Best	Better
Cleaning Methods:						
Vapor Degreasing	No	No	No	No	No	Yes
Ultrasonics	No	No	No	Yes	No	Yes
Size	**10 oz. Aerosol**	**10 oz. Aerosol**	**12 oz. Aerosol**	**1 Gallon**	**6 oz. Aerosol w/brush**	**8 oz. Aerosol**
TT No.	**754CH621**	**754CH3110**	**754CH634**	**754CH1638**	**754CH660**	**754CH658**
PRICE	**$11.51**	**$15.59**	**$18.59**	**$219.64**	**$15.22**	**$17.62**
Size		**16 oz. Aerosol**		**5 Gallon**	**12 oz. Aerosol**	**18 oz. Aerosol**
TT No.	**–**	**754CH1631**	**–**	**754CH638**	**754CH1660**	**754CH651**
PRICE		**$19.74**		**$844.77**	**$21.53**	**$32.63**

MicroCare

Flux Removers

Fast-drying, ozone-safe, residue-free solvents for circuit board cleaning.

Trigger Grip™ System for MicroCare Solvents

- Reduces waste
- Heat shield protects hose from hot soldering tips
- Improves solvent control to clean more effectively
- Choice of attachments

Solvent Miser™ Trigger Grip™

Durable for years of use, including hose and aerosol connectors. Produced with ESD-dissipative materials and complies with MIL-STD-2000 requirements. Includes standard brush.

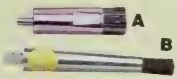
No. 565CH021 ..... **$51.00**

No. 565CH022 ESD-Safe bench mount kit **$14.50**

Attachments

A. Natural Bristle Brush
No. 565CH023 ..... **$4.50**

B. Surface Mount Brush
No. 565CH024 ..... **$7.50**



Model	PowerClean II PW2	SuprClean SPR	Flux Remover C FRC	VeriClean DC1	ProClean PRO
Primary Function	Defluxer for lead-free solder paste residues. The Strongest Defluxer/Degreaser, Period	Very Powerful defluxer and degreaser, for fast, effortless cleaning	Moderately powerful, versatile defluxer safe on most plastic components	A milder, versatile defluxer very safe on plastics and for skin contact	The mildest defluxer, totally plastic-safe, mil-spec approved
Primary Chemical or Ingredient	HFC and Trans Solvents	HFC and Trans Solvents	HFC Solvents	Siloxanes	Ultra-Pure Alcohols
Aroma	Slight	Very Slight	Very Slight	Mild	Alcohol
Toxicity (TLV or AEL)	200 (est.)	256 (est.)	240 (DuPont)	200 (Dow-Corning)	568 (calc.)
Flammability	Nonflammable	Nonflammable	Nonflammable	Flammable	Flammable
Removes Fluxes	Best	Very Good except lead-free	Very Good except lead-free	Good, very versatile	Good, very versatile
Removes Other Residues Very Well	Grease, Oils, Fingerprints	Grease, Oils	–	Silicone residues, coatings	–
Plastic-Safe?	No	No	Test	Yes	Yes
Drying Speed (or "Evaporation Rate")	Very Fast	Very Fast	Fast	Medium	Slow
Suitable for Use in Heated Cleaning System	No	No	Yes	No	No
TT No.	**565CH671**	**565CH002**	**565CH004**	**565CH001**	**565CH010**
Package Size	**10 oz. Aerosol**	**12 oz. Aerosol**	**10 oz. Aerosol**	**10 oz. Aerosol**	**12 oz. Aerosol**
PRICE	**$16.71**	**$20.48**	**$17.33**	**$16.27**	**$11.55**
TT No.	**565CH672**	**565CH735**	**565CH4400**	**565CH0011**	**565CH018**
Package Size	**One Gallon**	**One Gallon**	**One Gallon**	**One Gallon**	**One Gallon**
PRICE	**$214.65**	**$323.83**	**$365.70**	**$127.73**	**$53.00**
TT No.	**565CH673**	**565CH737**	**565CH4407**	**565CH100**	**565CH641**
Package Size	**5 Gallon**	**5 Gallon**	**5 Gallon**	**5 Gallon**	**5 Gallon**
PRICE	**$736.70**	**$833.16**	**$837.40**	**$564.45**	**$155.29**

Chemtronics Best Seller

Conformal Coatings

Konform® Conformal Coatings are used for spray, dip tank and brush applications. These coatings provide excellent electrical insulation properties that withstand hot and cold operating environments, as well as heat generated by electronic circuitry.

- Aerospace, marine manufacturing, electrical equipment, instrumentation and data communication
- Printed circuit board & flex circuit protection
- Withstanding severe environmental stress, thermal shock, mold and fungus attack

Konform® Resistance	SR	SR High Viscosity	AR
Temperature	Best	Best	Better
Abrasion	Fair	Fair	Best
Acid	Better	Better	Best
hydrocarbon	Better	Better	Good
Humidity	Best	Best	Best
Underwriters lab			
Voltage Transient	Yes	Yes	No
UL Recognized	Yes	No	No
UV Traceable	Yes	Yes	Yes
Coating Characteristics			
Flexibility	Best	Best	Fair
Solderability	Best	Best	Better
Repairability	Better	Better	Best
Dielectric Breakdown	1100	1100	8300
Working Temperature	-85° to 392°F -64° to 200°C	-85° to 392°F -64° to 200°C	-75° to 270°F -59° to 132°C
Product Characteristics			
Aerosol	21.0 sq. ft	N/A	20.2 sq. ft
Liquid	250 sq. ft	718 sq. ft	254 sq. ft
Tack Free Time	15 min	15 min	30 min
Full Cure time	24 hrs @ RT	24 hrs @ RT	24 hrs @ RT
TT No.	**237CH012**	**–**	**237CH210**
Size (Aerosol)	**10 oz.**	**–**	**11.5 oz.**
PRICE	**$29.17**	**–**	**$22.72**
TT No.	**237CH001**	**237CH111**	**–**
Size (Liquid)	**Gallon**	**Gallon**	**–**
PRICE	**$278.80**	**$884.66**	**–**

TECHSPRAY

Conformal Coatings

RoHS Compliant

SR - Silicone resin; excellent moisture and chemical resistance; UL recognized.

AR - Economical, acrylic; insulates against high voltage arching and corona shorts; resists moisture and fungus.

TURBO-COAT - Fast drying acrylic; Dry to the touch in 3 minutes; thick, one pass coating application.

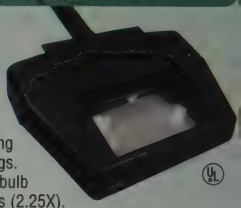
UR - Urethane; highly resistant to most solvents, moisture, fungus and molds. Clear, repairable coating formulated with a black light indicator.

HT - Silicone resin conformal coating; withstands extreme temperatures. Excellent adhesion; Moisture and fungus resistant; Temperature stable; Solvent resistant.

Features	Best Seller 2102 SR	2103 AR	2108 TURBO-COAT	New! 2104 UR	2106 HT
Thermal Shock	Best	Good	Good	Better	Best
Moisture Resistance	Best	Good	Good	Better	Best
Chemical Resistance	Better	Poor	Poor	Best	Good
Static Resistance	Best	Better	Best	Good	Good
Vibration Resistance	Best	Good	Good	Good	Best
Standards:					
Mil-I-45058C	Yes	Yes	Yes	Yes	Yes
IPC-CC-830B	Yes	Yes	Yes	Yes	Yes
UL (UL746C)	Yes	No	Yes	No	No
Characteristics:					
Dry to Touch	1 hr	15 min	5 min	15 min	45 min
Full Cure	72 hrs	24 hrs	24 hrs	24 hrs	24 hrs
Accelerated Cure	75 min	50 min	15 min	50 min	15 min
UV Inspection	Yes	Yes	Yes	Yes	Yes
Repairability	Better	Best	Best	Poor	Better
Dielectric Strength (V/mil)	1100	800	1000	380	560
Size	**12 oz. Aerosol**	**12 oz. Aerosol**	**12 oz. Aerosol**	**12 oz. Aerosol**	**12 oz. Aerosol**
TT No.	**754CH212**	**754CH012**	**754CH2812**	**754CH412**	**754CH2106**
PRICE	**$23.42**	**$18.85**	**$18.85**	**$21.57**	**$21.03**
Size	**1 Gallon**	**1 Gallon**	**1 Gallon**	**1 Gallon**	**1 Gallon**
TT No.	**754CH2102**	**754CH107**	**754CH2801**	**754CH2104**	**754CH2101**
PRICE	**$215.73**	**$129.83**	**$129.83**	**$194.00**	**$245.49**
Size	**5 Gallon**	**5 Gallon**	**5 Gallon**	**5 Gallon**	
TT No.	**754CH2105**	**754CH2135**	**754CH2805**	**754CH2145**	**–**
PRICE	**$1,037.03**	**$513.95**	**$513.95**	**$782.04**	

Conformal Coatings Inspection

LUXO



UV Portable Magnifier

Ideal for inspecting conformal coatings. 13W UA-A black bulb and 5 diopter lens (2.25X). 4" x 2.5" viewing area. **Includes:** 10' cord with plug-in ballast; Protective cover. Black.
No. 516IN405 .....**$130.00**

LUXO

Conformal Coatings Inspection Handheld UV Magnifier

Simplify inspection of conformal coatings. Coatings glow brilliantly under UV black illumination, especially when magnified through the 5-diopter (2.25x) optical quality glass lens. Unique combination of (2) 4W UV black bulbs and (2) 4W fluorescent white bulbs also perfect for inspection of welds, solder joints, flux and hairline stress cracks.
No. 516IN401 .....**$270.00**

BAYCO *Compact, General Purpose UV Light*

UV Inspection Light

Twin tube ultra violet test light for leak detection and quality control, ideal for post cleanroom cleaning inspection. Shows dust/contamination with UV fluorescent bulb that produces long wavelength UVA radiation in the 320-400 nanometer range. Housing is made of chemical-resistant polypropylene. 20' lead, instant on/off switch, polycarbonate lamp protector with light reflector. Detection range: 2'. (Mexico)
No. 629IN509 (SL-509) **$30.35**

ATT: Government buyers
You can download our
6 GSA CONTRACTS
at Techni-tool.com
GSA Advantage!®
www.gsaAdvantage.gov

Chemask® Soldering Mask

Chemtronics RoHS Compliant

Chemask® Lead-Free Soldering Mask

High temperature, peelable temporary mask ideal for lead-free applications. Can be used with tin/lead solders. Useable within five minutes of application with preheat cycles. Provides short-term high-temperature protection. RoHS compliant.

8 fl. oz. (236ml) Liquid Squeeze Bottle
No. 237CH880.....$17.91
1 gallon (3.7L) Liquid
No. 237CH818.....$154.16

Chemask® NA

RoHS Compliant

Non-ammoniated solder mask agent is safest spot mask available for sensitive metals. Stable to 550°F. For lead-free or tin/lead processes. Peelable. Dries tack-free in 15 minutes. Goes straight in the pre-heat oven. Green.

8 fl. oz. (236ml) Liquid Squeeze Bottle
No. 237CH318 .....$13.97
1 gallon (3.7L) Liquid
No. 237CH311 .....$141.16

Chemask® Peelable

Easy Seller

The fast curing, peelable temporary solder mask. Easy-to-use – just peel off! Dried Chemask®. Dries tack-free in 30 minutes.

8 oz. liquid squeeze bottle
No. 237CH008 .....$13.98
One gallon liquid (Not Shown)
No. 237CH003..... $141.16

Chemask® HV

The high viscosity peelable solder mask, that is usable within five minutes of application with preheat cycle.

8 oz. liquid squeeze bottle
No. 237CH380.....$17.59

Chemask® W

Temporary solder masking agent dissolves in water cleaning cycle. Ideal as a UV indicator in QC applications. Non-corrosive, safe for sensitive gold, silver and copper.

8 oz. Squeeze bottle
No. 237CH080 .....$12.92

Insulating Varnish

Red Insulating Varnish

Alkyd-base compound. 2 oz. bottle.

No. 388AE050.....$11.36

TEGHSPRAY RoHS Compliant

Temporary Solder Mask

P - Synthetic latex mask designed for no-clean and solvent cleaning operations

W - Quick drying. Water soluble mask formulated with non-corrosive materials.

WSOL - Designed specifically for use in closed loop and in-line aqueous cleaning systems. Easily removed with inline and batch cleaning systems.

PL - High strength, peelable natural latex solder mask. Fastest full cure.

Easy Seller

Features	2204 Wondermask® WSOL	2205 Wondermask® W	2211 Wondermask®P	2218 Wondermask® PL Latex
Mask type	Water Washable	Water Washable	Peelable	Peelable
Full Cure Time	Best	Good	Good	Best
Filter Safe	Yes	No	N/A	N/A
Shelf Life	12 mo	12 mo	12 mo	6 mo
Odor	Better	Best	Best	Good
Gold/Copper Compatible	Yes	Yes	Yes	No
Mil-STD-2000 P. 5.3.18	No	Yes	Yes	Yes
Size	**8 oz. Squeeze Bottle**	**8 oz. Squeeze Bottle**	**8 oz. Squeeze Bottle**	**8 oz. Squeeze Bottle**
TT No.	**754CH048**	**754CH058**	**754CH118**	**754CH188**
PRICE	**$16.65**	**$12.37**	**$11.63**	**$10.10**
Size	**1 Gallon**	**1 Gallon**	**1 Gallon**	**1 Gallon**
TT No.	**754CH049**	**754CH205**	**754CH213**	**754CH218**
PRICE	**$154.41**	**$95.37**	**$99.78**	**$88.30**

Heat Sink Compound

TEGHSPRAY

Silicone Free Heat Sink Compound

Apply under power transistors and other devices that generate heat to assist in transferring heat from the generating objects to metal chassis for dissipation. Product will not harden, dry out, melt or contaminate wave solder baths. Designed to eliminate the phenomenon of silicone migration. Has a functional temperature range from -40°C (-40°F) to 200°C (392°F). 4 oz. squeeze tube. **(USA)**

No. 754CH978 .....$24.86

Heat Sink Grease

A silicone compound that facilitates heat transfer away from electrical/electronics components. Will not dry out, harden or melt. Nonflammable, non-corrosive. *Meets Mil-DTL-47113D, Type I.*

No. 237CH405 5 oz. tube **$19.50**

Polishing Kit

Plastic Polish Kit

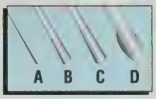
A complete system for scratch removal and surface restoration of plastic, acrylic and fiberglass. Plastic Polish #1 cleans, shines and protects all plastic surfaces. Plastic Polish #2 removes fine scratches and haziness. Plastic Polish #3 removes heavy scratches and prepares the surface for the #2 formula. Includes a non-abrasive polishing cloth. **(USA)**

2 oz. bottles (Not Shown) **8 oz. bottles**
No. 586CH7136....$8.75 No. 586CH7100 ..$17.50

Oil Dispensers

TECHNI-TOOL

Microspatulas



These microspatulas are ideal for applying lubricants to small moving parts as well as the application of adhesives in the assembly of electronic components. Non-rolling, color code handles, includes dust cap.

A. Ex. Fine Dia. .008" (Black)
No. 758SO0000 .....$23.80/12 pack
No. 758SO0000EA .....$2.50 each
B. Fine Dia. .014" (Blue)
No. 758SO0001 .....$24.00/12 pack
No. 758SO0001EA .....$2.50 each
C. Med. Dia. .022" (Green)
No. 758SO0002 .....$24.00/12 pack
No. 758SO0002EA .....$2.50 each
D. Lrg. Dia. .033" (Red)
No. 758SO0003 .....$24.00/12 pack
No. 758SO0003EA .....$2.50 each

Needle Point Oiler

Excellent for small lubricating projects. Superior to petroleum-based lubricants. Reduces friction and wear. Odorless, clean and non-staining. Safe on rubber, plastic, wood and metal. 0.25 oz. **(USA)**

No. 512CH333.....$4.97

Techni-Tool Dry Wipes

Less expensive than Kimwipes® with 100% of the quality!

COMPARE AND SAVE!

TECHNI-TOOL

Light-Weight General Task Wipes

Safe for all laboratory environments. Wipes clean with low-lint performance. Available in two sizes. Convenient pop-up containers fit Kimwipes® Box Holders.

4-1/2" x 8-1/2" wipe – 280 wipes/pack Easy Seller
No. 758CH6011 .....**$3.38/pk.**

4-1/2" x 8-1/2" wipe – 280 wipes/pack; 60 packs/case
No. 758CH6001
(1-6) **$177.50** (7-11) **$168.63** (12+) **$159.75**

15" x 17" wipe – 140 wipes/pack Easy Seller
No. 758CH6010 .....**$10.29/pk.**

15" x 17" wipe – 140 wipes/pack; 15 packs/case
No. 758CH6000
(1-6) **$135.00** (7-11) **$128.25** (12+) **$121.50**

TECHNI-TOOL

Cotton Wipes

New T-Shirt material. Soft, absorbent, low-lint, general use, cotton-blend wipes. Net Wt. 9 lbs.
No. 758CH6300 ..**$24.55**

Dymon

Rinse-Free Hand Cleaning. Anywhere! Anytime!

Scrubs-In-A-Bucket

Cleans the toughest soils, greases, tar and even printer ink from your hands. Each dispensing canister contains 72-each 12-1/4"L x 10-1/2"W perforated hi-strength absorbent cleaning towels, treated with a gentle-to-skin but effective heavy-duty grease-cutting formula. Leaves the skin lotion-soft, with a natural citrus fragrance. Contains germ-fighting Triclosan™.
No. 307CH422
(1-11) **$14.80 ea.** (12+) **$13.32 ea.**

Kimwipes®

Kimberly-Clark

Delicate Task Wipers

Easy Seller

Kimwipes® EX-L light duty wipers can handle a variety tasks. Wipes up liquid and dust. Anti-stat dispensing reduces lint and electrostatic discharge, controls usage and reduces waste. Pop-up box.

4.5"x 8.5"; 280/box
No. 134UN011 (34155) White.....**$5.14**/box
4.5"x 8.5"; 280/box; 60 boxes/case
No. 134UN010 (34155) White **$237.79**/case
15" x 17"; 140/box
No. 630CH342 (34256) White.....**$16.12**/box
15" x 17"; 140/box; 15 boxes/case
No. 134UN012 (34256) White **$190.78**/case
12" x 12"; 196/box
No. 630CH133 (34133) White.....**$9.77**/box
12" x 12"; 196/box; 15 boxes/case
No. 630UN413 (34133) White **$117.78**/case

Multi-Ply Delicate Task Wipers

Kaydry® EX-L 2-ply wipe combines low-lint tissue softness with multi-ply absorbency. Wipes clean; extra low lint and extractable performance.

12" x 12"; 119/box
No. 630PR7050 (34705) White.....**$15.43**/box
12" x 12"; 119/box; 15 boxes/case
No. 630PR705 (34705) White **$157.06**/case
15" x 17"; 90/box
No. 630CH347 (34721) White.....**$20.82**/box
15" x 17"; 90/box; 15 boxes/case
No. 630CH721 (34721) White **$209.01**/case

One at a time for users on the go!

WYPALL X80 Towels

The choice for your toughest jobs. Made from Hydroknit® - a fast-absorbing material. Softer and more absorbent. Pound for pound, absorbs more water and oil than shop towels. Guaranteed more cost-effective than shop towels or rags. Ideal for heavy wiping, preparing surfaces with solvents on smooth or rough surfaces and more. 9.1" x 16.8".

80 towels/box
No. 630CH1131.....**$30.83**
5 boxes/case
No. 630CH1130.....**$123.34**

Reinforced Wipers

Reinforced for extra scrubbing and cleaning power, WypAll® X60 Teri® wipers offer extra absorbing power in a lighter weight. Tough enough for big jobs – soft enough for face and hands.

9.1" x 16.8"; 126/box
No. 630PR790 (34790) White **$16.16**/box
9.1" x 16.8"; 126/box; 10 boxes/case
No. 630PR7090 (34790) White **$117.21**/case

Kimtex Heavy-Duty Wipers

Reusable, heavy-duty shop wipers in a 1/4 fold format can be used with oils and solvents. Polypropylene construction for cloth-like feel and long-lasting performance. Low lint; absorbs quickly for big cleanups.

12" x 14.4"; 66/box
No. 630CH3360 (33560) Blue **$19.03**/box
12" x 14.4"; 66/box; 8 boxes/case
No. 603PR336 (33560) Blue.....**$107.18**/case

Kimwipes® Box Holders

Great for holding your small or large Kimwipe boxes. This acrylic, clear holder has extra weight for one-hand dispensing. Large wall mount comes with mounting screws or tape. **(USA)**
Small: 4-1/2" x 8-1/2"
No. 174PR224.....**$14.30**
Large: 15" x 17"
No. 174PR234.....**$18.05**

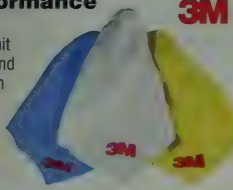
Push-Up Box Dispenser for Task Wipes

New!

No more digging for tissues. Dispenses one tissue at a time every time. Durable high-impact polystyrene. Holds packs of 4.5" x 8.5" wipes.
Compatible with: 758CH6011, 758CH6001, 134UN011 and 134UN010.
No. 860CH001 .....**$15.95**

Scotch-Brite™ Cloths

Scotch-Brite™ High Performance Cloths



Cloth's unique knit pattern of tufts and valleys traps both small and large particulates. Bi-components in the polyester and nylon microfibers pickup for both oil and water. **Specs:** 12.6" x 14.2"; wash up to 100 times; water absorption: 7.2g water per/g wipe; oil absorption: 7.1g oil per/g wipe. **(USA)**

Color	Case of 50	10/Pk
Blue	105PR111	105CH0001
White	105PR112	105CH0002
Yellow	105PR114	105CH0004
PRICE	$163.89	$32.38

TechSpray Dry Wipes

TECHSPRAY

Techclean® Wiper

Hydroentangled cellulose/polyester wipe with high absorbency and extra low particulate generation. 9" x 9" C-fold wipes. **100/pk.**
No. 754UN350.....**$21.35**

Techclean® Twillwipe

Tightly woven 100% cotton designed for wiping abrasive surfaces. High tear strength prevents shredding. Low triboelectric generation and low linting. 6" x 6". **100/pk.**
No. 754CH710.....**$23.56**

TechClean® SMT Bluewipe

Specifically designed for general maintenance, this blue hydroentangled cellulose/polyester wipe has high absorbency with extra low particulate and chemical extractables. Can be used in cleanroom maintenance, solvent and aqueous absorbent, dislodgment of heavy soils, and static free environments. 9" x 9" flat wipes. **300/pk. (USA)**
No. 754PR359 .....**$39.99**

Techclean® Purwipe™

Ideal for removing solder paste from fine pitch stencils. Interlocking knit provides super absorbency, low particulate generation and high durability. Doesn't fray when used repeatedly. Cleanroom compatible with each wipe separately bagged. 9" x 9". **100/pk. (USA)**
No. 754CH355.....**$39.03**

New!

Microfiber Glass & Plastic Cleaning Wipes

Removes fingerprints and light oils without solvents. Low linting, washable. 8" x 8" dry wipes with hemmed edges. **50/pk.**
No. 754CH363 .....**$57.35**

Anti-Static Wipes

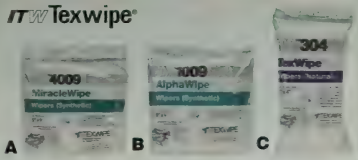
TECHSPRAY

Anti-Static Wipes

Made up of continuous fiber which prevents fraying and decreases particulate generation. Contains DuPont's NEGASTAT® Carbon Yarn which dissipates static charge. 9" x 9".
No. 754CH362 (2362-150) ....**$102.49/150 wipes**

Texwipe Dry Wipes

ITW Texwipe®



A. MiracleWipe® Wipers

Highly absorbent nylon offers excellent abrasion resistance for rigorous use or wiping rough surfaces. 100% continuous filament nylon provides excellent tensile strength, elasticity and durability. Great for use with alkaline cleaners. Cleanroom laundered and processed for low particulate generation. 9" x 9". Three inner bags of 50 wipers (150 wipers total).
No. 776PR009 (TX4009).....**$75.47**

B. AlphaWipe® Wipers

Highly absorbent polyester features low particles, fibers, NVR and ions for use in critical environments. Great as a general-use synthetic wiper as well as cleaning medical devise prior to sterilization.
9" x 9", 2 inner bags of 75 wipers (150 wipers/total)
No. 776PR090 (TX1009).....**$32.03**

9" x 9", bulk pack of 2 inner bags of 75 wipers (150 wipers/total) SAVE!
No. 776CH091 (TX1009B) **$28.83**

C. TexWipe® Wipers

Heat-resistant, durable, soft-textured cotton guards against static discharge (dissipative performance in 40-60% Rh environments). Excellent for cleaning equipment in wafer fabrication and where high temperatures prevent the use of synthetic wipers. 4" x 4". 4 inner bags of 300 wipers (1200 wipers total.)
No. 776UN018 (TX304) **$81.09**

ITW Texwipe®

Lowest NVR in a nonwoven blended wiper

VersaWipe® Wipers

General-purpose, cleanroom-packaged wiper ideal for aqueous-spill cleanup and similar applications requiring low contamination levels, high absorbency and cost efficiency. Suitable for ISO class 6 and greater cleanroom environments. Excellent wet/dry strength. Hydroentangled, nonwoven blend of 55% cellulose and 45% polyester. Autoclavable. **300 wipers/bag.**
No. 776CH629 (TX629) **$13.87**

Chemtronics Dry Wipes

These dry wipes are designed for controlled environments, laboratory and benchtop applications, sensitive cleaning (i.e. optical surfaces) and for high absorbency applications. All are cleanroom packaged.

Chemtronics

Controlwipes™

Nonwoven spun laced polyester cellulose fabric will not tear or shred, unravel or lint, and will not abrade surfaces. Controlwipes™ are resistant to most solvents, alcohols and also dilute acids. Double bagged. 9" x 9", 150 wipes per bag. **(USA)**
No. 237UN010 .....**$36.73**

Chemtronics

Twillwipes™

Highly absorbent, 100% cotton wipes. Use Twillwipes™ for abrasion-free cleaning and drying of sensitive surfaces, components and equipment. Plus, they are resistant to caustic solvents and temps. to 302°F. Double bagged. 9" x 9", 150 wipes per bag. **(USA)**
No. 237UN012 .....**$81.49**

SCOTT Dry Wipes

SCOTT

Medium Duty Wipes.

WypAll®

All-around strength, softness and absorbency. **Specs:** Size: 11" x 10.4"; Color: white; Case Size: 25-1/2" x 19-1/4" x 12". Box Count: 90 wipes. 9 boxes/case.
No. 630UN045 ....**$98.33/case**

Light Duty Wipes.

WypAll® Light

Super-soft and absorbent, economically-priced. **Specs:** Size: 11" x 10.4"; Box Count: 100 wipes. 12 boxes/case.
No. 630UN080 *(Not Shown)* **$125.29/case**

Oily Waste Disposal Can

Ideal for use when cleaning boards with spray chemicals. Hold board over can and spray. Can safely catches drips and over-spray. Bright red color with safety label. Dispose of oil-soaked rags and protect your facility from fire. OSHA compliant.

2-Gallon Countertop Oily Waste Can
No. 476IE9200 .....**$65.00**

6-Gallon Oily Waste Can with Foot-Operated Cover
No. 476IE9100 .....**$73.80**

Chemtronics Repair/Prototype Tools

Quick-drying and easily-applied repair/prototype tools are packaged in conveniently-sized dispensers. All CircuitWorks® products are IPC-7711 and ANSI/ J-STD-001 complaint.

CircuitWorks® Conductive Pen

The pen dispenser for drawing solderless, highly conductive silver traces, jumpers and shielding with precision and control. Can be low temperature soldered. Air dries in 5 to 10 minutes.

No. 237CH200 Standard tip 8.5g **$26.80**
No. 237CH202 Micro tip 8.5g **$26.80**

CircuitWorks® Overcoat Pen

Best Seller

Use this dielectric conformal overcoat pen to protect and insulate circuit boards and more. When used to repair solder mask, this material insulates against high-voltage arcing and corona shorts. 4.9g.

No. 237CH206 Green **$19.10**
No. 237CH3300 Clear **$19.10**

CircuitWorks® Conformal Coating Remover Pen

Remove silicone, acrylic, urethane and most other types of coatings in seconds. Evaporates quickly while providing low surface tension. 9g (0.32 oz).

No. 237CH500.....**$13.84**

CircuitWorks® Flux Dispensing Pen

Applies a patented noncorrosive, halide free, organic no-clean flux with precision and control. Meets IPC-SF-818. 9g (0.32 oz).

No. 237CH800 .....**$7.45**

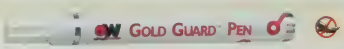
Applies a noncorrosive Type R flux with precision and control. Meets MIL E+F Type R and RMA. *(Not Shown.)* 9g (0.32 oz).

No. 237CH820 .....**$7.18**

CircuitWorks® Flux Remover Pen

The pen for precise removal of flux from printed circuit boards in seconds.

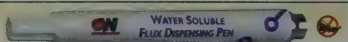
No Clean Flux Remover Pen (Shown)
No. 237CH910 9g (0.32 oz) **$10.27**
Rosin Flux Remover Pen
No. 237CH920 8g (0.28 oz) **$9.83**



CircuitWorks® Gold Guard™ Pen

Clean and lubricate gold and other noble metal contacts or connectors. Extends the life of noble metal.

No. 237CH740 8.5g (0.3 oz) **$12.44**

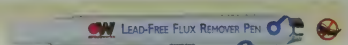


Water Soluble Flux Dispensing Pen

New! RoHS Compliant

Applies a neutral pH organic water soluble flux for rapid soldering. Chisel tip marker provides exact delivery of flux to surface. Easily removed with water. 9g (0.32 oz.)

No. 237CH803 .....**$6.65**



CircuitWorks® Lead-Free Flux Remover Pen

RoHS Compliant

Remove lead-free flux with the precision and control of a pen in seconds. Can also be used to remove tin/lead fluxes. Dries fast. RoHS compliant. 9g (0.32 oz) pen.

No. 237CH940 .....**$10.55**

CircuitWorks® Lead-Free Flux Dispensing Pen

RoHS Compliant

Now you can apply lead-free flux with the precision and control of a pen. Applies a non-corrosive, halide-free, no-clean flux for high temperature lead-free applications. Can also be used for tin/lead fluxes. Flux meets Bellcore TR-N-NWT-000078, IPC SF-818 for Surface Insulation Resistance; and ANSI/IPC J-STD-004, Type ROL0; Easily removed with lead-free flux remover; RoHS compliant. 9g (0.32 oz) pen.

No. 237CH840 .....**$8.41**

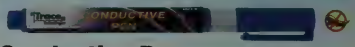
RoHS Compliant

CircuitWorks® Lead-Free Flux

Non-corrosive, halide-free flux for lead-free or tin/lead solders used on PCBs, chip carriers, SMD pads and switches. Fast drying, high thermal stability and excellent material compatibility.

No. 237CH3220 1 qt. **$16.51**

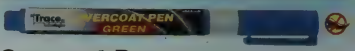
TECHSPRAY Board Repair Pens



Conductive Pen

This pen contains a fast driving, silver filled ink designed to quickly make highly conductive silver traces. Repair damaged or defective traces; create smooth jumpers; solderless interconnects. **(USA)**

No. 754CH505 .....**$19.21**



Overcoat Pen

Insulate printed circuit board traces and components against high voltage arcing. Formulated with OptiScan for black light inspection, use for touch-up in rework and repair printed circuit boards. **(USA)**

No. 754CH509 Green **$13.36**

Flux Remover Pen

Provides a convenient method for touch-up cleaning of flux residues. Safe on plastics, it dissolves type R, RMA, SA and most non-clean fluxes. Use on: printed circuit boards; surface mount device pads; gold fingers; connectors; switches; relays; and microwave and telephone circuitry. **(USA)**

No. 754CH506 .....**$8.24**

No-Clean Flux Dispensing Pen

Designed to dispense No-Clean Flux in the high precision applications. The resin and halide-free no-clean flux will leave no residues. Will not damage commonly used plastics. Use on: printed circuit boards; surface mount device pads; connectors; switches and relays. **(USA)**

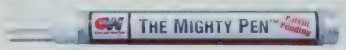
No. 754CH507 .....**$6.37**

Conformal Coating Removing Pen

Quickly and precisely remove most conformal coatings including acrylic, urethane, and silicones. Use on any application where coating removal is necessary (This product is not recommended for use on acrylic, polystyrene or polycarbonate materials). **(USA)**

No. 754CH510 .....**$9.54**

Cleaning Pens



Universal Cleaning Power!

The Mighty Pen

Looking for one pen that removes it all? Universal cleaning is at your fingertips with the Mighty Pen. Precise spot removal of conformal coating from PC boards, flux residues, label adhesives, marker and ink stains, soils and more. Quick evaporation and low surface tension for superior wetting. Mild citrus aroma, fast drying, low toxicity. 11g (0.39 oz.).

No. 237CH3700 (CW3700) .....**$9.48/Ea.**

MicroCare

Take this biodegradable citrus solvent with you anywhere!

TidyPen®

Great for removing marking tags, paper labels, stickers, EPROM labels and bar codes. Kapton® tape residues melt away easily and safely. Cost-effective with little waste. 14 ml.

No. 565CH016 .....**$7.88**

LOCTITE

LOCTITE

Use with Loctite® Threadlockers, Retaining Compounds and Low Viscosity Thread Sealants

Peristaltic Hand Pump

Reduce waste by adding this hand pump onto any Loctite® 50 ml or 250 ml bottle for better flow control. Will not leak regardless of bottle orientation. Adjustable positive flow of 0.01 ml to 0.40 ml with viscosities up to 30,000 cP.

No. 512CH9841 50 mL **$89.75**
No. 512CH7001 250 mL **$89.75**

Threadlockers

Threadlockers are used to prevent fastener loosening in situations of vibration and thermal cycling. Threadlockers will also protect threaded assemblies from rusting and galvanic corrosion when exposed to harsh environments. The various formulations available make them suitable for use in applications ranging from delicate electronic assemblies to heavy construction equipment.

	Product	Typical Use	Color	Viscosity (cP)	Torque In./lbs M10 Steel Nuts & Bolt Break/Prevail	Temp Range (F°)	Cure Speed Fixture/Full	Primer (see below)	Agency Approvals	Container	TT No.	PRICE
Low Strength	222	Small screws under 1/4"	Purple	1,200/5,000 thixotropic	53/30	-65 to 300	10 min./ 24 hrs.	N or T		10 ml bottle 50 ml bottle	512CH463 512CH464	$11.25 $32.05
	222MS	Easy removal, small screws under 1/4"	Purple	1,200/ 5,000 thixotropic	53/30	-65 to 300	10 min./ 24 hrs.	N or T	MIL-S-46163A ASTM D-5363 NSF P1, CFIA	10 ml bottle 50 ml bottle 250 ml bottle	512AD034 512AD036 512CH2421	$11.53 $32.05 $111.33
Removable Strength	242	Removable grade up to 3/4" bolts	Blue	1,200/ 5,000 thixotropic	100/43	-65 to 300	10 min./ 24 hrs.	N or T	MIL-S-46163A ASTM D-5363 NSF P1, ABS, CFIA NSF/ANSI 61	.5 ml capsule 10 ml bottle 50 ml bottle 250 ml bottle	512CH205 512AD038 512AD040 512CH4241	$1.58 $11.53 $32.05 $111.33
	243	1/4" – 3/4" bolts with light oil contamination	Blue	2,500/ 5,000 thixotropic	180/62	-65 to 300	5 min./ 24 hrs.	N or T	NSF/ANSI 61 CFIA	10 ml bottle 50 ml bottle	512CH077 512CH4078	$12.70 $35.17
	248	1/4" to 3/4"	Blue	Semisolid	110/43	-65 to 300	10 min./ 24 hrs.	N or T	NSF/ANSI 61 CFIA	9 g stick 19 g stick	512AD248 512AD0248	$11.71 $24.72
	2440	Primerless, medium strength	Blue	1,800/ 6,800 thixotropic	215/53	-65 to 300	3 min./ 24 hrs.	N or T		10 ml bottle	512CH8431	$51.19
High Strength	262	Locking up 3/4" bolts	Red	1,800/ 5,000 thixotropic	189/275	-65 to 300	5 min./ 24 hrs.	N or T	MIL-S-46163A ASTM D-5363 NSF P1, ABS, CFIA	.5 ml capsule 10 ml bottle 50 ml bottle	512CH262 512AD221 512AD222	$1.58 $11.53 $32.05
	271	Up to 1" fasteners	Red	500	250/275	-65 to 300	10 min./ 24 hrs.	N or T	MIL-S-46163A ASTM D-5363 UL classified for U.S., CFIA	.5 ml capsule 10 ml bottle 50 ml bottle	512AD271 512AD042 512CH131	$1.58 $11.53 $32.05
Wicking	290	Wicking grade for preassembled parts	Green	12	85/250	-65 to 300	6 min./ 24 hrs.	N or T	MIL-S-46163A ASTM D-5363 NSF/ANSI 61 NSF P1, ABS, CFIA	.5 ml capsule 10 ml bottle 50 ml bottle	512CH290 512AD046 512CH031	$1.58 $11.53 $32.05
Plastic	425 Assure™	Small metal/ plastic fasteners and tamper-proofing	Blue	80	4/2	-65 to 180	1.5 min./ 24 hrs.	N/A	N/A	20g bottle	512AD425	$17.78
Primers	7471 T	Anaerobics	Amber	2			30-70 secs.		MIL-S-22473E ASTM D-5363	1.75 oz bottle 4.5 oz can 1 gallon can	512CH267 512CH879 512CH9268	$15.20 $28.46 $222.87
	7649 N	Anaerobics	Clear/ Green	2			30-70 secs.		MIL-S-22473E ASTM D-5363 NSF/ANSI 61 NSF P1 CFIA	1.75 oz bottle 25 g can 4.5 oz can	512CH192 512CH213 512CH134	$13.58 $9.33 $21.11

LOCTITE

Instant Cyanoacrylate Adhesives

These high-performance, application-specific instant adhesives create high-speed durable bonds to a wide variety of substrates including rubber, plastic, metal and ceramic. Wide variety of viscosities, cure speeds and gap-filling capabilities available.

	Product	Typical Use	Color	Gap Fill	Category	Shear Viscosity (cP)	Strength (psi)	Temp Range (F°)	Cure Speed Fixture/Full	Agency Approvals	Container	TT No.	PRICE
General purpose - hard to bond substrates	Prism™ 401	General purpose	Clear	.005"	Ethyl	110	3,200	-65 to 180°	15 sec./ 24 hrs.	CFIA	3 g tube 20 g bottle 1 lb. bottle	512AD104 512AD401 512AD016	$4.34 $17.60 $229.76
	Prism 406	Wicking grade	Clear	.004"	Ethyl	20	3,200	-65 to 180°	15 sec./ 24 hrs.	A-A-3097	3 g tube 20 g bottle	512CH406 512AD641	$4.45 $17.60
	Prism 454	Porous surfaces	Clear	.010"	Ethyl	Gel	3,200	-65 to 180°	15 sec./ 24 hrs.	CFIA/ABS	3 g tube 20 g bottle	512CH404 512CH440	$4.34 $18.80
Toughened-impact resistant	Black Max™ 380	Close fitting parts	Black	.006"	Ethyl	300	3,750	-65 to 225°	90 sec./ 24 hrs.		3 g tube 1 oz bottle	512CH004 512AD050	$4.34 $24.29
	Prism 410	Gap filling	Black	.008"	Ethyl	3,500	3,200	-65 to 225°	90 sec./ 24 hrs.		3 g tube 20 g bottle	512CH410 512AD045	$4.45 $19.35
	Prism 411	Clear gap filling	Clear	.008"	Ethyl	5,000	3,200	-65 to 210°	30 sec./ 24 hrs		3 g tube 20 g bottle	512CH104 512AD411	$4.34 $19.35
Low odor/ low bloom-stops frosting from outgassing	Prism 408	Wicking grade	Clear	.002"	Alkoxy	5	2,600	-65 to 160°	50 sec./ 24 hrs.		20 g bottle	512CH840	$19.79
	Prism 460	Close fitting parts	Clear	.004"	Alkoxy	45	2,600	-65 to 160°	50 sec./ 24 hrs.		3 g tube 20 g bottle	512CH6004 512CH044	$4.68 $19.79
Fast Curing	Prism 4500	Porous surfaces	Clear	.010"	Surface insensitive Ethyl	Gel	2,760	-65 to 180°	5 sec./ 24 hrs.		3 g tube 20 g bottle	512CH553 512CH554	$4.45 $19.36
	Prism 4501	Wicking grade	Clear	.004"	Surface insensitive Ethyl	20	2,66	-65 to 180°	5 sec./ 24 hrs.		3 g tube 20 g bottle	512CH146 512CH145	$4.45 $17.60
	Prism 4502	General purpose	Clear	.005"	Surface insensitive Ethyl	100	2,810	-65 to 180°	5 sec./ 24 hrs.		3 g tube 20 g bottle	512CH231 512CH232	$4.45 $17.60
	Prism 4503	Gap filling	Clear	.007"	Surface insensitive Ethyl	650	2,910	-65 to 180°	5 sec./ 24 hrs.		3 g tube 20 g bottle	512CH312 512CH214	$4.45 $17.60
Flexible	Prism 4851	Porous/ absorbent substrates	Clear	.006"	Flexible Alkyl	400	2,175	-65 to 212°	30 sec./ 24 hrs		20 g bottle	512CH732	$22.76
	Prism 4861	Gap filling	Clear	.008'	Flexible Alkyl	4,000	2,465	-65 to 212°	25 sec./ 24 hrs.		20 g bottle	512CH708	$22.76
Ultra performance wire tacking	Tak Pak™ 382	Gap filling	Clear	.008"	Ethyl	5,000	3,200	-65 to 180°	30 sec./ 24 hrs		20 g bottle 1 lb bottle	512AD382 512AD261	$19.35 $256.24
	Tak Pak 382 Kit	Gap filling	Clear	.008"	Ethyl	5,000	3,200	-65 to 180°	Instant cure with 7452 accelerator		382 - 20 g bottle 7452 - 0.7 oz can	512CH382	$37.43
	Tak Pak 444	PCB assembly/ repair	Clear	.007"	Ethyl	700	3,200	-65 to 180°	30 sec./ 24 hrs	A-A-3097	20 g bottle 1 lb bottle	512AD030 512AD444	$13.94 $185.28
	Tak Pak 444 Kit	PCB assembly/ repair	Clear	.007"	Ethyl	700	3,200	-65 to 180°	Instant cure with 7452 accelerator	A-A-3097	382 - 20 g bottle 7452 - 0.7 oz can	512AD018	$23.43

LOCTITE

Instant Cyanoacrylate Adhesives (Continued)

	Product	Typical Use	Color	Gap Fill	Category	Shear Viscosity (cP)	Strength (psi)	Temp Range (F°)	Cure Speed Fixture/Full	Agency Approvals	Container	TT No.	PRICE
Accelerators	Tak Pak 712	All cyano-acrylates	Clear/ amber		Isopropanol	1			< 30 sec.	MIL-46050C CFIA	.7 oz metered mist 1.75 oz bottle 1 gallon can	512CH636 512CH389 512CH390	$12.27 $8.16 $74.32
	Tak Pak 7452	All cyano-acrylates	Clear/ amber		Acetone	0.4			< 30 sec.	MIL-46050C	1.75 oz metered mist 1.75 oz brush-cap bottle 1.75 oz spray bottle	512AD637 512CH7452 512CH580	$12.27 $6.61 $7.36
General plastic/ metal/ rubber bonding	Quick Set™ 404	Rubber O-ring bonder	Clear	.005"	Ethyl	80	3,500	-65 to 180°	30 sec./ 24 hrs	ABS/CFIA A-A-3097	1/3 oz bottle	512AD072	$19.43
	Super Bonder™ 409	General purpose	Clear	.010"	Ethyl	Gel	3,200	-65 to 180°	75 sec./ 24 hrs.		20 g bottle	512CH945	$15.22
	Super Bonder 414	Plastic	Clear	.006"	Ethyl	110	3,200	-65 to 180°	20 sec./ 24 hrs	CFIA A-A-3097	3 g tube 1 oz bottle	512CH414 512AD056	$3.62 $18.85
	Super Bonder 416	Plastic - gap filling	Clear	.008"	Ethyl	1,500	3,200	-65 to 180°	30 sec./ 24 hrs	CFIA A-A-3097	1 oz bottle	512CH650	$17.31
	Super Bonder 420	Plastic - wicking type	Clear	.002"	Ethyl	2	2,900	-65 to 180°	20 sec./ 24 hrs	A-A-3097	1 oz bottle	512AD420	$17.31
	Super Bonder 430	Metal - close fitting parts	Clear	.005"	Methyl	80	3,600	-65 to 180°	30 sec./ 24 hrs	A-A-3097	3 g tube 1 oz bottle	512CH430 512AD064	$3.33 $17.61
	Super Bonder 495	General purpose	Clear	.004"	Ethyl	45	2,750	-65 to 180°	20 sec./ 24 hrs	A-A-3097 ABS	3 g tube 1 oz bottle	512AD074 512AD076	$3.09 $17.31
	Super Bonder 496	Rubber - general purpose	Clear	.005"	Methyl	125	3,600	-65 to 180°	30 sec./ 24 hrs	A-A-3097	1 oz bottle	512AD082	$17.61
	Super Bonder 498	Thermal cycling	Clear	.007"	Ethyl	500	3,000	-65 to 180°	50 sec./ 24 hrs		1 oz bottle	512CH850	$19.04
	QuickTite™	Precision applicator	Clear	.010"	Ethyl	Gel	2,800	-65 to 180°	45 sec./ 24 hrs.		.14 oz bottle	512CH920	$5.05
Solvent	768 X-NMS	No rinse, no residue Cleanup							<30 sec.		1.75 oz bottle	512CH768	$25.25
Primer	Prism 770	Promotes adhesion with all cyano-acrylates	Colorless		Heptane	1.25			30 sec.	CFIA	1.75 oz bottle	512CH396	$12.46

LOCTITE

Light Cure Adhesives

Single-component, solvent-free adhesives cure in seconds when exposed to UV/visible light. For bonding, encapsulating, coating, tacking and sealing applications.

	Product	Benefit	Key Substrates	Color	Viscosity (cP)	Temp Range (F°)	Shear Strength (psi)	Cure Type	Container	TT No.	PRICE
Acrylic	3104	Durable, low viscosity	Polycarbonate, thermoplastic, polyvinylchloride	Clear/ pale straw	160	-65 to 300°	3155	Ultraviolet, visible	25 ml syringe	512CH3694	$28.00
	3494	Durable, medium viscosity	Glass, metal	Clear/ pale straw	5500	-65 to 300°	2440	Ultraviolet, visible	25 ml syringe	512CH765	$28.00
	3525	Flexible, moisture resistant	Glass, metal thermoset plastic	Clear/pale straw/ fluorescent	15000	-65 to 300°	1480	Ultraviolet, visible	25 ml syringe	512CH220	$28.00
Silicone	5240	Self-leveling, noncorrosive	Glass, metal ceramic	Translucent/ white	18000	-65 to 350°	-	Ultraviolet, visible, moisture	30 ml syringe	512CH141	$42.40

LOCTITE

Medical Device Adhesives

Designed to meet toxicity testing and sterilization resistance requirements of medical device assembly.

	Product	Benefit	Key Substrates	Color	Viscosity (cP)	Temp Range (F°)	Cure Type	Container	TT No.	PRICE
Cyanoacrylates	Prism™ 4011	Surface insensitive	Thermoplastic, thermoset plastic, metal, elastomer, including rubber	Clear	100	-65 to 180°	Humidity	20 g bottle	512CH682	$25.89
	Prism 4014	General Purpose	Thermoplastic, thermoset plastic, metal	Clear	3	-65 to 225°	Humidity	20 g bottle	512CH0269	$17.80
	Prism 4061	Surface insensitive	Thermoplastic, thermoset plastic, metal, elastomer, including rubber	Clear	20	-65 to 180°	Humidity	20 g bottle	512CH686	$25.89
	Prism 4541	Surface insensitive	Thermoplastic, thermoset plastic, metal, elastomer,	Clear	Gel	-65 to 180°	Humidity	20 g bottle	512CH690	$27.59
Light cure Cyanoacrylates	Flashcure™ 4306		Thermoplastic, polycarbonate, elastomer, metal	Fluorescent	20	-65 to 180°	Ultraviolet, visible, humidity	1 oz bottle	512CH439	$48.23
	Flashcure 4307		Thermoplastic, polycarbonate, elastomer, metal	Fluorescent	900	-65 to 180°	Ultraviolet, visible, humidity	1 oz bottle	512CH441	$48.23
Acrylic UV/visible with fluorescence	3971		Metal, thermoplastic, polyvinylchloride, polyurethane	Fluorescent	320	-65 to 300°	Ultraviolet, visible,	25 ml syringe	512CH6792	$33.28

LOCTITE

Hysol® Epoxy Systems

Loctite offers a full line of one and two part epoxy urethane adhesives for potting, encapsulating, and structural bonding. These materials are conveniently packaged in dual cartridge syringe that eliminate the need of mixing the material. This offers the advantage of reduced labor, accurate mix ratios, and reduced waste due to minimum batch size being eliminated.

A

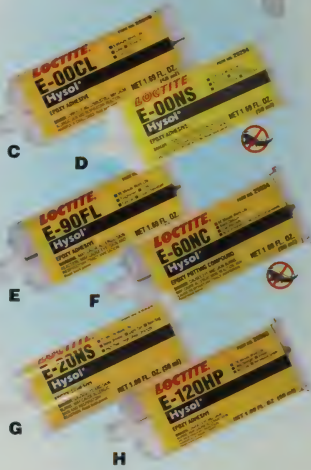
B

Mix Nozzle

Disposable, plastic nozzles conveniently attach to DURABOND double barrel cartridge. Adhesive is automatically mixed as it travels through the nozzle. 50ml Mix Nozzle-6.3mm ID, stepped end. **10/pack**
A. No. 512AC441 .....$9.40/Pk.

50ml Dispenser

Manual dispensing gun for use with DURABOND 50ml double barrel cartridges. Comes with two different plungers, allowing it to be used with either 1:1 or 2:1 ratio cartridge.
B. No. 512AC531 .....$46.89



C D E F G H

JUST THE FACTS

Product Number	C. E-00CL	D. E-00NS	E. E-90FL	F. E-60NC	G. E-20NS	H. E-120HP
TT No.	512CH289	512CH293	512CH309	512CH323	512CH334	512CH353
Features	Fast Setting, Flowable, Low Odor	Non-Sag, Low Odor	Toughened Impact Resistant, Flexible	Non-Corrosive Potting Compound	Low-Sag, High-Temp, Metal Bonder	Ultra Strength Non-Sag Aerospace Grade
Color	Clear	Translucent	Grey	Black	Tan	Amber
Viscosity (cP)	10,000	100,000	40,000	8,000	60,000	30,000
Worklife-mins.	5	5	90	60	20	120
Shear Strength	2,160	3,000	810	2,630	2,790	4,300
Cartridge Size	50ml	50ml	50ml	50ml	50ml	50ml
PRICE	$11.58	$11.58	$11.58	$10.88	$11.58	$11.58

LOCTITE

5040™ RTV Silicone Potting Compound

New!

Non-corrosive, self-leveling RTV silicone for shallow potting, sealing and coating of devices. Seals against moisture, solvents and environmental conditions. Cures in 24 hours at room temperatures.
3 oz. (85g) tube.
No. 512CH405 .....**$22.05**

LOCTITE New!

5045™ Flange Sealant

Non-corrosive, Alkoxy silicone RTV paste excellent for adhesion, sealing and gasketing applications.
3 oz. (85g) tube.
No. 512CH0409 .....**$29.85**

LOCTITE New!

Frees part by shock freezing!

Freeze & Release

Instantly freezes seized and rusted parts down to -45°F (-43°C). Exceptional shock-freeze effect causes microscopic cracks in the layer of rust, allowing the lubricant to wick directly into the rust. The assembly can then easily be dismantled. Parts remain lubricated and protected from corrosion.
No. 512CH964 .....**$11.48**

LOCTITE New!

609 Retaining Compound

Low viscosity retaining compound that bonds rigid metal assemblies. Maximum gap fill of 0.005" diameter. Cures in 10 minutes and provides a shear strength of 2,300 psi after 24 hours. Temperature range -65°F to 300°F. Green. 10ml bottle.
No. 512AD094.....**$11.53**

Devcon. *New snap-open cap – no cutting required!*

Epoxy Adhesives

5-Minute® Epoxy

Rapid-curing, general-purpose adhesive/encapsulant. Bonds rigid, durable substrates such as metal, glass, ceramics, concrete and wood. Fixtures in 5 minutes or less.
No. 288CH250 (14250 25ml Dev-Tube) **$4.67**

For Super-Fast Repairs!

5-Minute Epoxy

Sets in five minutes. Bonds most materials, including cement and metal. Two 1-1/4 oz. tubes.
No. 288AE016.....**$8.04**

5-Minute® Epoxy Gel

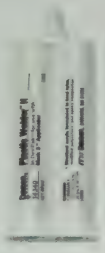
Thixotropic, nonmigrating gel adhesive with excellent gap filling properties. For bonding rough or smooth surfaces. Stays put on vertical or inverted surfaces. High tensile strength (2500 psi). Good solvent resistance.
No. 288CH240 (14240 25 ml Dev-Tube).....**$6.20**

2-Ton® Clear Epoxy

Extremely strong, medium-cure, water-resistant adhesive. Produces strong, rigid bonds on metal, ceramics, wood, concrete, glass or combinations. Fills poorly mated surfaces and cures without shrinking. Good impact strength.
No. 288CH310 (14310 25ml Dev-Tube) **$5.25**

Plastic Welder II™

Toughened structural adhesive for bonding such difficult-to-bond substrates as nylon-containing alloys, modified polyesters, epoxy composites and plastics. **Features:** Superior strength, durability and impact resistance; Fixes in 30 minutes, cures in 3 hours at room temperature. 47 ml DevPak. (Not Shown)
No. 288CH340 ....**$12.81**



Conductive Epoxy

For materials that can't be soldered, use this two-part conductive epoxy for general purpose conductive bonding in repair and prototype applications. Quick-cure, perfect for bonding heat sensitive components. 0.25 oz. tube.
No. 237CH204 .....**$41.87**

Glue Gun Kits

LOCTITE

Hot Melt Applicator

Industrial grade, hand-held applicator for dispensing 0.50" diameter adhesive sticks. Heats up to 215°C immediately to dispense polyimide hot melts. Lightweight, well balanced and ergonomically designed for operator comfort and application control. Dispense rate and timing manually controlled with the trigger mechanism. Includes standard nozzle, plastic stand and wire hanger. 120V AC, 60Hz, single phase, 400 Watts.
Hysol® 050-HT Hot Melt Applicator
No. 512IE031.....**$108.41**

Loctite® Hysol® Hot Melt Adhesives

Series	232	7804FRM-HV
Color	Clear	Amber
Viscosity cP at Dispense Temp	11,000	6,000
Tensile Strength (PSI)	-	2454
Open Time	15 sec.	35 sec.
Temp Resistance	153°F	220°F
% Elongation	-	300
Key Specs.	FDA CFR 175.105	UL 94V-0
Quantity	10" 5oz. bag	10" 5oz. bag
TT No.	**512CH244**	**512CH383**
PRICE	**$8.18**	**$13.39**

Professional Auto Hot Melt Glue Gun™

Lever-feed mechanism ensures an even flow of glue time after time. For instant joining of wood, plastics, ceramics, metal, fabrics. No heat fluctuation. Silicon feed sleeve has a built-in flexible diaphragm designed for easier feeding & to seal off and eliminate hot melt back-up. **Kit Includes:** Trigger Gun with standard cone tip, easy action trigger and safety stand. **(USA)**

Pro Auto Hot Melt Glue Gun Kit
No. 302MI016 ....**$23.50**

10" All Purpose Sticks (10/box)
No. 166AC104.....**$8.00**

4" All Purpose Sticks (24/box)
No. 302AD673.....**$7.50**

Best Seller

BRANSON

Ultrasonic Cleaning

These cleaners have been designed to be functional, reliable and easy to use. All controls are mounted in an easily-accessible control panel above and behind the cleaning tank. They're easily seen and are above any liquid for safety and reliability. Powerful enough to remove heavy oils, buffing compounds or proteins, consistent enough to manage difficult laboratory cleaning and safe enough for those delicate electronic components or fine jewelry. Digital models offer you maximum control of cycle time up to 99 minutes and bath temperatures to 70°C. You can count on batch-to-batch consistency because the unit automatically resets to the last setting. Just reload the tank and restart! Timers are adjustable up to 60 minutes and incorporate a hold feature for continuous cleaning. All feature a two-year guarantee and meet FCC, CSA and CE standards.

ALL UNITS FEATURE AN INDUSTRIAL TRANSDUCER!

Model	8510	5510	3510	2510	1510
Tank Size (LxWxD)	19-1/2"x11-1/2"x6"	11-1/2"x9-1/2"x6"	11-1/2"x6x6"	9-1/2"x5-1/2"x4"	6"x5-1/2"x4"
Overall Size (LxWxD)	24"x18"x14-1/2"	16"x15-1/2"x14-1/2"	16"x12"x14-1/2"	13-1/2"x12"x11-1/2"	10"x12"x11-1/2"
Tank Capacity	5.5 gal.	2.5 gal.	1.5 gal.	0.75 gal.	0.50 gal.
Weight	26 lbs.	14 lbs.	12 lbs.	9 lbs.	7 lbs.
Frequency	40 kHz	40 kHz	40 kHz	40 kHz	40 kHz
Drain	Yes	Yes	Yes	No	No
Digital Control Plus Heater & Timer, 120V	**208UL818 $2,058.00**	**208UL518 $1,177.00**	**208UL318 $921.00**	**208UL218 $594.00**	**208UL118 $451.00**
Mechanical Timer Plus Heater, 120V	**208UL817 $1,880.00**	**208UL517 $1,091.00**	**208UL317 $825.00**	**208UL217 $535.00**	**208UL117 $377.00**
Mechanical Timer Stainless Steel	**208UL816 $1,641.00**	**208UL516 $1,022.00**	**208UL316 $726.00**	**208UL216 $480.00**	**208UL116 $340.00**
OPTIONAL ACCESSORIES • OPTIONAL ACCESSORIES • OPTIONAL ACCESSORIES • OPTIONAL ACCESSORIES					
Tank Cover	Included	Included	Included	Included	Included
Perforated Tray	**208UL823 $171.00**	**208UL523 $96.00**	**208UL064 $72.00**	**208UL162 $63.00**	**208UL160 $43.00**
Basket Stainless Steel	–	–	**208UL323 $71.00**	**208UL223 $62.00**	**208UL123 $42.00**

BRANSON

IC Series Integrated Ultrasonic Cleaning System

Industrial power in a small footprint. Rugged design and stainless steel construction assure years of trouble-free operation. **Features:** Digital temperature set point 60°C; Digital timer sets from 1-99 minutes and counts down from each cycle start; Easy-to-see digital display for time and temperature readout; Cover and basket included; Front mounted controls for convenient operation; Fill and drain connections for bath maintenance; Heavy-duty industrial transducer elements. Available in 25kHz or 40kHz ultrasonic transducers to help match cleaning power with your application. CSA and UL Listed. ***Two-Year Warranty.*** **(USA)**

JUST THE FACTS		
Tank Dimensions	12" x 16" x 13"	16" x 20" x 16"
Tank Capacity	10 gal	21 gal
Overall Dimensions	20-3/4" x 19" x 16-3/4"	24-3/4" x 23" x 20-3/4"
Transducer Elements	12	18
Power requirements at 230 VAC, 1 phase	9.2 Amps	14 Amps
Wattage	500	750
Ultrasonic Frequency of 25	**208CH813 $4,475.00**	**208CH823 $5,595.00**
Ultrasonic Frequency Of 40	**208CH814 $4,475.00**	**208CH825 $5,595.00**

BRANSON

Weighs only 3 lbs.

Compact Tabletop Ultrasonic Cleaner

This compact, 3-pound, tabletop, ultrasonic cleaner is truly portable and affordable. 15 ounce stainless steel tank and impact-resistant plastic housing. A cover and basket make it ideal for cleaning small parts. Features a 5-minute timer that shuts off automatically.
Specs: Tank Dimensions: 6-1/2"L x 3-1/2" W x 2-1/4"D; Power Supply: 40 kHz; Power Requirements 117VAC, 60 Hz.
No. 208CH200.....**$125.00**

Ultrasonic Detergents and Cleaners

BRANSON

OC Optical Cleaner

Removes general soils, fingerprints, cerium oxide, pitch and blocking waxes from optical lenses and polishing compounds from glass.1 gal.
No. 208CH724.....**$25.75**

EC Electronics Cleaner

Removes oils, resins, rosins and other soils from hard surfaces encountered in the electronic, plating and other related industries. 1 gal.
No. 208CH914.....**$23.25**

IS Industrial Strength

Removes grease, oils and particulates from automotive, aircraft and similar mechanical components: cleans shop oils and light carbon deposits. 1 gal.
No. 208CH116 .....**$31.75**

GP General Purpose

Removes general soils, fingerprints, dust, light oils and greases. 1 gal.
No. 208CH955 .....**$26.50**

General Purpose Powder

Same as above but powder solution in 2lb. container. (makes up to 75 gallons of cleaning solution) 2 lb.
No. 208CH2300 .....**$34.33**

OR Oxide Remover

Removes rust and oxides from all metals. 1 gal.
No. 208CH516 .....**$33.75**

Additional Concentrated Ultrasonic Cleaning Formulas

Alconox Detergent

Biodegradable, odorless, mild (pH9.0 - 9.6). Leaves no residue after proper rinsing. Special formulation inhibits corrosive action on most metals. 4 lb.
No. 500CH012.....**$23.89**

Alconox Detergent 8®

Low-foaming, phosphate-free detergent can be used to clean circuit boards, electronic parts, delicate industrial parts and nuclear-contaminated equipment during outage. 1 gal.
No. 117CH701 .....**$62.50**

Citranox™ Acid

Contains acid ingredients for high-performance removal of metal oxides, salts and Cleaner inorganic residues combined with full detergent capability. Used on soft metals. 1 gal.
No. 500CH3373.....**$35.75**

Introducing Agilent's newest oscilloscope.

Biggest screen. Best signal visibility.

New!

Agilent Technologies
Authorized Distributor

InfiniiVision 7000 Series Oscilloscopes

See more analog, digital and serial signals better with just one instrument. With bandwidths up to 1 GHz and unparalleled deep memory waveform update rates of up to 100,00 waveforms per second, you'll debug faster and never miss an infrequent event. Each model has a 12.1" XGA LCD display critical for displaying up to 20 channels simultaneously with serial protocol. A 7" enclosure that weighs only 14 pounds provides better bench space utilization and portability.

Starting at just... $6950.00

Oscilloscopes		
DSO7032A 2-channel, 350 MHz	No. 431TE7032	$6,950.00
DSO7034A 4-channel, 350 MHz	No. 431TE7034	$8,850.00
DSO7052A 2-channel, 500 MHz	No. 431TE7052	$9,300.00
DSO7054A 4-channel, 500 MHz	No. 431TE7054	$11,050.00
DSO7104A 4-channel, 1 GHz	No. 431TE7104	$13,950.00
MSO7032A 2-channel, 350 MHz	No. 431TE7033	$9,000.00
MSO7034A 4-channel, 350 MHz	No. 431TE7035	$11,330.00
MSO7052A 2-channel, 500 MHz	No. 431TE7053	$13,300.00
MSO7054A 4-channel, 500 MHz	No. 431TE7055	$14,500.00
MSO7104A 4-channel, 1 GHz	No. 431TE7105	$17,900.00
Upgrade Kits		
2-channel, 350 MHz DSO to MSO upgrade kit	No. 431TE2735	$2,050.00
4-channel, 350 MHz DSO to MSO upgrade kit	No. 431TE235	$2,480.00
2-channel, 500 MHz DSO to MSO upgrade kit	No. 431TE2736	$4,000.00
4-channel, 500 MHz DSO to MSO upgrade kit	No. 431TE236	$3,450.00
1 GHz DSO to MSO upgrade kit	No. 431TE2737	$3,950.00
Accessories		
Carrying case	No. 431TE2733	$150.00
Rack Mounted kit	No. 431TE2733	$150.00
Secure environment mode	No. 431TE123	$510.00
ANSI Z540 calibration	No. 431TE1234	$304.00
RS-232/UART trigger and decode option	No. 431TE232	$1,250.00
CAN, LIN decode option	No. 431TE230	$1,250.00
FlexRay triggering and decode option	No. 431TE200	$2,562.00
I2C and SPI decode option	No. 431TE210	$1,250.00
Segmented memory option	No. 431TE201	$1,250.00
MSO FPGA dynamic probe-application for Xilinx	No. 431TE7406	$1,535.00
MSO FPGA dynamic probe application for Altera	No. 431TE5433	$1,535.00

Features:

- ***Comprehensive suite features-rich applications including:***
  - Serial decode and trigger for I²C, SPI, CAN, LIN, FlexRay, RS-232 and other UART
  - Rapid core-assisted debug of designs with Xilinx or Altera FPGAs
  - Segmented memory for analysis of laser pulses, radar bursts and serial packets
  - Offline PC viewing and sharing of previously acquired scope data
  - RF contextual viewing of scope data using Vector Signal Analysis software
- Fastest update rate - Up to 100,000 waveforms per second. For designs with both digital and analog signal measurements, updates at 5,000 times faster than other scopes so you see critical details.
- 350 MHz, 500 MHz, or 1 GHz bandwidth models
- 8 Mpts standard memory
- Up to 4 GSa/s analog and 2 GSa/s digital sample rate
- Available in 2 and 4 channels models
- Optional 16 digital channels on all MSO models
- Localized built-in help in 11 languages
- Easy 5-minute user-installable DSO to MSO upgrades

Agilent Technologies

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ALL 6000 SERIES NOW AVAILABLE WITH BATTERY POWER OPTION!
Just add a B to the TT No. when ordering!

Don't start tomorrow's project with yesterday's technology!

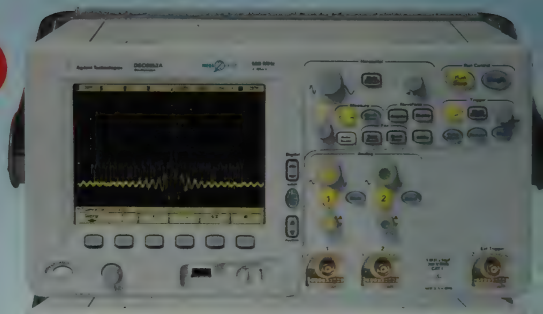
6000 Series Oscilloscopes

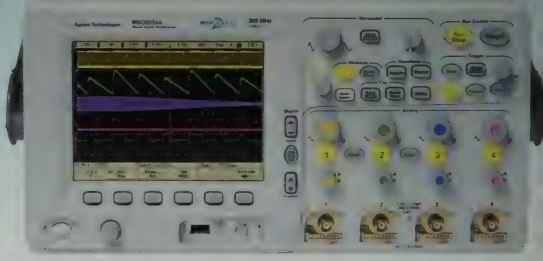
This series delivers more powerful features and higher performance than any scope in their price range. DSO models can be upgraded to MSO capability.
Includes: (4) passive probes.

Features:

- More Bandwidth - up to 1 GHz
- More channels - up to 20 time-aligned scope & logic channels in one instrument
- More memory - up to 800 times more than the leading competitor's scope series
- Dedicated controls for each channel
- Powerful triggering-including HDTV, CAN, I²C, LIN, SPI and USB
- More display - XGA color display with 100,000 waveforms/second update rate and 256 levels of intensity grades
- More connectivity choices- Standard USB (front & rear), Ethernet, GPIB Interface with XGA video output
- Autoscale
- Automatic and cursor measurements
- Front panel USB port
- Built-in help
- Infiniium™ AutoProbe interface
- Built-in storage compartment
- **Now available with battery power option -** Battery option provides a rechargeable 12V lithium ion battery that supplies 2 hours of power that allows you to take your scope anywhere.

431TE6052





431TE6035

Identify your most elusive problems faster with:

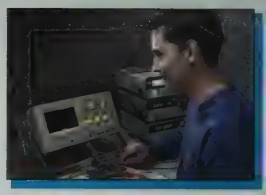
Leading-edge technology: The 6000 Series oscilloscopes incorporate third generation MegaZoom III technology blocks –responsive deep memory, fast update rates with minimal "dead time" and analog-like display systems – and deliver them in a compact package.

Fast update rate: View infrequent anomalies that most scopes miss with an update rate 5000 times better than the competition.

Fast deep memory: Always on, deep and responsive, MegaZoom III memory so you can see more time with more detail.

Real-time serial decode: Hardware-based serial decode provides unrivaled real-time update rates to capture infrequent protocol errors.

Fast digital debug: Combine analog channels with 16 time-correlated digital channels for rapid debug.



Deep memory MegaZoom III lets you:

See more time
This is the most easily understood use of deep memory. The more samples that you acquire, the more time that you can see at a particular sample rate. Long capture times give you better visibility into cause-effect relationships in your design, which greatly simplifies root-cause debugging. It also allows you to capture start-up events (like the start-up sequence below) in a single acquisition.

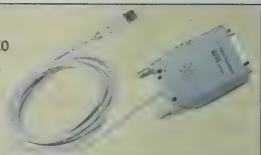
See more details
All scopes have a "banner" maximum sample rate specification, but many can only sustain these rates at a few timebase settings. In the case of an oscilloscope with a 5 GSa/s acquisition sample rate and 10,000 points of memory, those 10,000 points can only fill 2 Ìs of time. Since scopes have 10 time divisions, the sample rate drops at any time setting below 200 ns/div. As a result you may simply miss out on important signal details when you zoom in on it. Deep memory oscilloscopes let you sustain a high sample rate over longer periods of time.

Always fast, always on
MegaZoom III is the third generation of the fast and deep memory architecture. It's not a special mode, unlike other deep-memory oscilloscopes. You have access to your MegaZoom memory at all times. And the display will respond instantly to your commands as you scale the time/div settings or pan and zoom in the Delayed (or "zoom") window.

TT No	Model	Bandwidth	Max Sample Rate	Memory	Channels	PRICE
431TE6012	DSO6012A	100 MHz	2 GSa/s	MegaZoom III memory 1 Mpts standard, 2 Mpts and 8 Mpts optional	2	$4,720.00
431TE6013	MSO6012A				2 + 16	$6,774.00
431TE6014	DSO6014A				4	$5,748.00
431TE6015	MSO6014A				4 + 16	$7,802.00
431TE6032	DSO6032A	300 MHz	2 GSa/s		2	$6,950.00
431TE6033	MSO6032A				2 + 16	$9,000.00
431TE6034	DSO6034A				4	$8,850.00
431TE6035	MSO6034A				4 + 16	$11,330.00
431TE6052	DSO6052A	500 MHz	4 GSa/s		2	$9,300.00
431TE6053	MSO6052A				2 + 16	$13,300.00
431TE6054	DSO6054A				4	$11,050.00
431TE6055	MSO6054A				4 + 16	$14,500.00
431TE6102	DSO6102A	1 GHz	4 GSa/s		2	$12,000.00
431TE6103	MSO6102A				2 + 16	$15,900.00
431TE6104	DSO6104A				4	$13,950.00
431TE6105	MSO6104A				4 + 16	$17,900.00
FOR BATTERY OPTION ADD B – EX: 431TE6012B IS DSO6012A W/BATTERY OPTION.						$1,640.00

82357B USB/GPIB Interface

Provides a direct connection from the USB port on your PC to GPIB instruments. No switches to set, no PC cards to install, and no external power supplies required. Includes VISA and SICL software for Windows® 2000/XP. Interface with up to 14 GPIB instruments.
No. 431TE446 .....**$526.00**



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Capture what other oscilloscopes miss!

5000 Series Portable Oscilloscopes

Debug faster and more confidently with the 5000 series' combination of MegaZoom III deep memory, high-definition display and superior ability to capture transient signals. 1 Mpts of deep memory makes it easier to see cause and effect in a single trace with sustained rates when you're acquiring long periods of time. A 100,000 wfms/sec update rate improves your ability to capture and view infrequent and intermittent problems, and dramatically speeds up automated testing. The XGA resolution display with 256 levels of intensity reveals subtle details that most scopes can't show. And LAN, USB, GPIB and XGA video-out connectivity are all included standard.

431TE5054

Features:

- See more details for more time with 1Mpts deep memory
- Catch the most elusive glitches with a 100,000 wfms/s update rate
- See subtle details that other scopes won't show you with a high-definition, XGA display with 256 levels of intensity grading
- Easily transfer data to your computer with standard USB, LAN, GPIB and XGA-out connectivity.
- Built-in probe storage compartment
- Small and portable -- 15" wide footprint, less than 7" deep, just 9 lbs.
- Autoscale lets you quickly display any active signals, setting the scope for optimal display
- AutoProbe interface identifies and powers your probes
- Dedicated front-panel controls for each channel
- Compatible with web browser, IVI-COM w/SCPI, LabView™, IntuiLink toolbar, ViewScope
- ***Three-Year Warranty***

Includes: N2863A 300 MHz passive probe (1 per channel) - DSO5012A, DSO5014A, DSO5032A, DSO5034A, 10073C 500MHz Passive probe (1 per channel) - DOS5052A, DSO5054A; Agilent IO Libraries software, Service guide, Protective front cover. (Malaysia)

Model	**DSO5012A**	**DSO5014A**	**DSO5032A**	**DSO5034A**	**DSO5052A**	**DSO5054A**
TT No.	**431TE5012**	**431TE5104**	**431TE5032**	**431TE5034**	**431TE5052**	**431TE5054**
Bandwidth	100 MHz	100 MHz	300 MHz	300 MHz	500 MHz	500 MHz
Sample rate	2 GSa/s each channel				2 GSa/s each channel, 4 GSa/s max	
Channels	2	4	2	4	2	4
Display	Color, 1024 x 768 6.3" XGA LCD with 265 intensity levels					
Memory	1 Mpts max, 500 kpts each channel					
Update Rate	Up to 100,000 waveforms per second					
Vertical sensitivity	2 mV/div to 5 V/div					
Max input voltage	CAT I 300 Vrms 400 Vpk Transient overvoltage 1.6 kVpk CAT II 100 Vrms 400 Vpk					
Input impedance	10 M ± 1% I I 12 pF or 50 ±1.5% selectable					
Timebase accuracy	25 ppm					
Display mode	Main, delayed, XY and roll					
Triggering	Edge, Pulse width, Pattern, TV (Composite and HDTV/EDTV), Duration, Sequence					
PRICE	**$4,151.00**	**$5,023.00**	**$5,637.00**	**$7,072.00**	**$8,405.00**	**$10,245.00**
Options	ANSI Z540 Compliant Calibration **No. 431TE1277** **$302.00**			NISPOM compliance **No. 431TE3331** **$411.00**		

Agilent Technologies

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Color display and 200 MHz at industry's lowest prices!

3000 Series Oscilloscopes

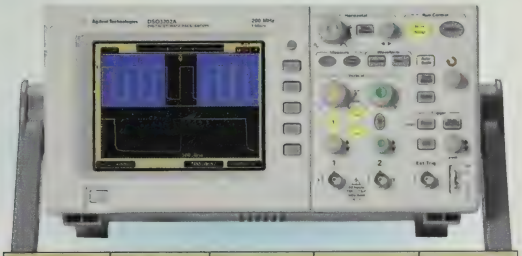
- 5.7" color display with 20% larger waveform area
- 1 GSa/s sample rate
- Measurement and analysis features cover a wide array of electronic test applications

Now you can outfit everyone with color scopes with making compromises in budget or performance. All 3000 Series scopes feature bright, clear color displays that show relationships you can easily miss in monochrome. And, thanks to a dual time base, it's easy to window in on specific areas of interest in a signal.

Take advantage of advanced triggering including edge, pulse width and line-selectable video; 4 kpts of waveform memory; standard USB host and device connectivity; 20 different automatic measurements; digital filtering features like LPF and HPF; segmented memory acquisition; 4 math functions including FFT; mask test standard; and much more.

**** For use with N2860A Scope Connect software***

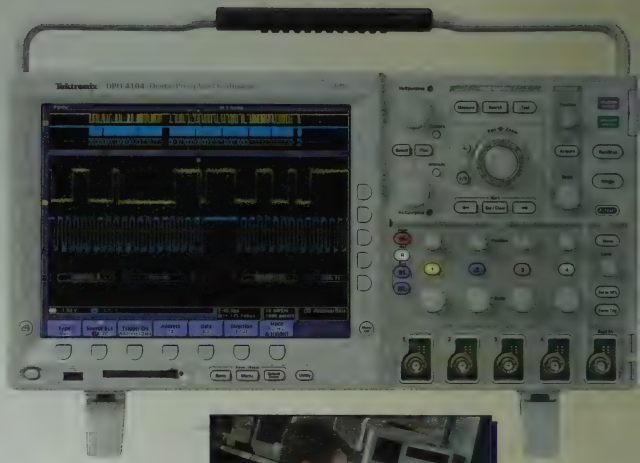
USB Module for 3000 Series Oscilloscopes – Print directly from 3000 Series oscilloscopes and save to flash memory devices.
No. 431TE865.....**$260.00**



Model	**DSO3062A**	**DSO3102A**	**DSO3152A**	**DSO3202A**
TT. No	**431TE3062**	**431TE3102**	**431TE3152**	**431TE3202**
Bandwidth	60 MHz	100 MHz	150 MHz	200 MHz
Channels	2			
Sampling rate	1 GSa/s (1 channel), 500 MSa/s (2 channels)			
Memory Depth	4 Kpts per channel			
Connectivity	USB*; GPIB and RS-232 optional			
Special Features	Color display (320x240 1/4 VGA LCD), segmented memory acquisition (record up to 1,000 frames of an area of interest within a signal), pass/fail testing based on user-defined masks, digital filtering to unwanted portions of input signals.			
PRICE	**$1,152.00**	**$1,415.00**	**$1,571.00**	**$1,729.00**

Tektronix® 4000 SERIES OSCILLOSCOPES

Debug Smarter. Not Harder.



DPO4000 Series
Digital Phosphor Oscilloscopes (DPOs)

DPO4000 Series are the first oscilloscopes to offer usable deep memory on all channels, excellent performance, serial trigger and analysis options in the most compact form factor in their class.

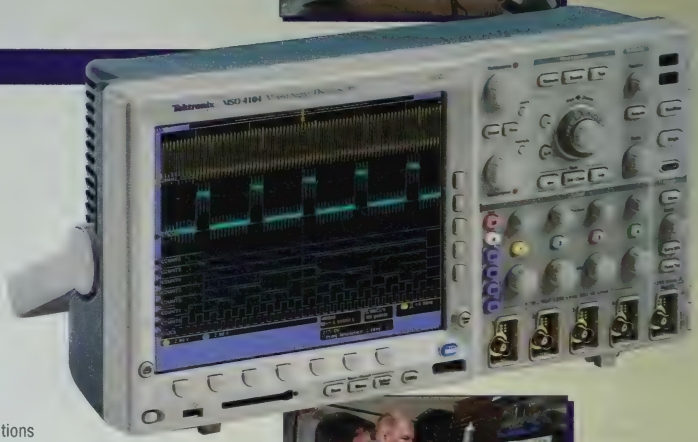
DPO4000 Series

MSO4000 Series
Mixed Signal Oscilloscopes (MSOs)

MSO4000 Series provide all the features of the DPO4000, but add 16 integrated digital channels, enabling you to visualize and correlate analog and digital signals on a single instrument. This integration extends triggering functionality across all 20 channels providing pattern and state triggering ideal for debugging mixed analog and digital designs.

Features and Benefits

- 1 GHz, 500, 350 MHz Bandwidth Models
- 2 and 4 Channel Models
- Sample Rates Up to 5 GS/s on All Channels
- 10 Megasample Record Length on All Channels
- 3,700 wfms/s Maximum Waveform Capture Rate
- Wave Inspector™ Controls Provide Unprecedented Efficiency in Waveform Analysis
- I²C, SPI, CAN Serial Triggering and Analysis
- 10.4 in. (264 mm) XGA Color Display
- Small Footprint and Lightweight - only 5.4" (137 mm) deep and 11 lbs. (5 kg)
- USB and CompactFlash on Front Panel for Quick and Easy Storage
- Built-in Ethernet Port
- Plug 'n' Play Connectivity and Analysis Software Solutions
- USB 2.0 Device Port for Direct PC Control of Oscilloscope using USBTMC
- Suite of Advanced Triggers
- e*Scope® Remote Viewing and Control
- Interoperability with Tektronix Logic Analyzers
- TekVPI™ Probe Interface Supports Active, Differential and Current Probes for Automatic Scaling and Units



MSO4000 Series

Redefine your expectations for working with long record lengths with innovative Wave Inspector controls:

Zoom/Pan - A dedicated, two-tier front-panel knob provides intuitive control of both zooming and panning.

Play/Pause - A dedicated play/pause button on the front panel scrolls the waveform across the display automatically while you look for anomalies or an event of interest.

User Marks - See something interesting on your waveform? Press the Set Mark button to bookmark the waveform. Navigating between marks is as simple as pressing the Previous and Next buttons on the front panel.

Search Marks - Search through your long acquisition based on user-defined criteria, including edge, pulse width, runt, logic, setup and hold, rise/fall time and parallel, I2C, SPI, RS-232/422/485/UART, CAN, LIN and FlexRay packet content.

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Tektronix® 4000 SERIES OSCILLOSCOPES

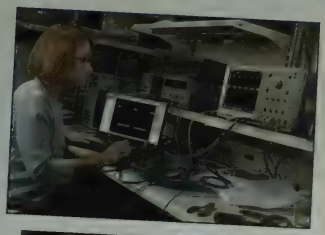
Designed to Make Your Work Easier

As design complexity increases, you need tools that help you find problems quickly.

Easy to Set-up and Use

The 4000 Series has a large 10.4 inch XGA display, a clean front panel with familiar knobs – all in a package that is only 5.4 in. deep and weighs only 11 lbs. With USB plug-and-play operation and PC connectivity, acquiring data and measurements from the instrument is as simple as connecting a USB cable from the oscilloscope to the PC.

Provided applications include NI LabVIEW SignalExpress™ Tektronix Edition LE, OpenChoice® Desktop and Microsoft Excel and Word toolbars enabling fast and easy direct communication with your Windows PC. USB and CompactFlash ports on the front panel enable simple transfer of screenshots, instrument settings and waveform data in the palm of your hand. When it comes to mixed signal design and debug, you want your instrument to be intuitive so you can start solving problems quickly. The MSO4000 Series drives like an oscilloscope, the tool you already know how to use. You do not have to relearn how to use the instrument every time you turn it on.



DPO4000 Applications

- Embedded Design and Debug
- Investigation of Transient Phenomena
- Power Measurements
- Video Design and Debug
- Spectral Analysis
- Automotive Electronics Design and Debug
- Manufacturing Test and Quality Control
- Electro-mechanical Design and Analysis
- Bio-medical Product Development
- Industrial Control

MSO4000 Applications

- Embedded Design and Debug
- Mixed Signal Design and Debug
- Investigation of Transient Phenomena
- Power Measurements
- Video Design and Debug
- Automotive Electronics

Compare Features

Model	DPO4000	MSO4000
Bandwidth	350 MHz - 1 GHz	350 MHz - 1 GHz
Record Length	10 M	10 M
Sample Rate	2.5 GS/s - 5 GS/s	2.5 GS/s - 5 GS/s
Rise Time	1 ns - 350 ps	1 ns - 350 ps
Channels	4	2 or 4 analog, plus 16 digital
Applications	~~Embedded design and debug;~~ Investigation of power; Automotive electronics	~~Embedded Design and Debug; Mixed Signal Design and Debug;~~ Investigation of Transient Phenomena, Video Design and Debug, Power, Automotive Electronics
Trigger Types	Edge; Sequence (B-trigger), Pulse width; Runt; Logic; Setup/Hold; rise/Fall time; Video; I2C (opt.); LIN (opt.); FlexRay (opt.); CAN (opt.)	Edge, Sequence (B-trigger), Pulse Width, Runt, Logic, Setup/Hold, Rise/Fall Time, Video, I2C (opt.), SPI (opt.), RS-232/422/485/UART (opt.), CAN (opt.), LIN (opt.), FlexRay (opt.), Parallel
Connectivity	RS-232; GPIB (opt.), CompactFlash© Mass Storage (4000 Series), LAN; May Include USB, PCMCIA, CD-ROM; Open access to OpenChoice© platform	RS-232; GPIB (opt.), CompactFlash© Mass Storage (4000 Series), LAN; May Include USB, PCMCIA, CD-ROM; Open access to OpenChoice© platform
Application Specific Solutions	I²C; SPI; RS-232/422/485/UART; CAN; LIN; FlexRay	I²C, SPI, RS-232/422/485/UART, CAN, LIN, FlexRay, Parallel
Waveform Math & Analysis	Simple waveform math; FFT or spectral; Compatibility with Windows analysis and productivity software	Simple waveform math; FFT or spectral; Compatibility with Windows analysis and productivity software
Other Features	Large 10.4 in. (264 mm) XGA color display, Small footprint (5.4 in. (137 mm) deep), Wave Inspector® waveform management, Front panel USB and CompactFlash ports, Plug-and play PC connectivity, TekVPI® probe interface	Large 10.4 in. (264 mm) XGA color display, Small 5.4 in. (137 mm) footprint, 60.6 ps digital timing resolution, Next-generation digital waveform display, Independent channel thresholds, Multi-channel set-up and hold, Wave Inspector® waveform management, Front panel USB and CompactFlash ports, Plug-and play PC connectivity, TekVPI® probe interface

Available Models

Model	DPO4104	MSO4104	DPO4054	MSO4054	DPO4034	MSO4034	DPO4032	MSO4032
TT No.	767TE4104	757TE4405	767TE4054	767TE4455	767TE4034	767TE403	767TE4032	767TE0432
Channels	4	4 + 16	4	4 + 16	4	4 + 16	2	2 + 16
Bandwidth	1 GHz	1 GHz	500 MHz	500 MHz	350 MHz	350 MHz	350 MHz	350 MHz
Sample Rate	5 GS/s	5 GS/s	2.5 GS/s	2.5 GS/s	2.5 GS/s	2/5 GS/s	2/5 GS/s	2.5GS/s
PRICE	**$14000.00**	**$17200.00**	**$11400.00**	**$13900.00**	**$9300.00**	**$10900.00**	**$8000.00**	**$8700.00**

DPO4000 & MSO4000 Options & Accessories

DPO4000 & MSO4000 Application Modules

Enables triggering on packet level information on buses as well as analytical tools such as digital views of the signal, bus views, packet decoding, search tools, and packet decode tables with time stamp information. Use DPS04AUTO for CAN bus; DPO4EMBD for I2C and SPI buses. SPI is available on four channel models only.

No. 767TE6610 DPO4AUTO.....**$1,300.00**

No. 767TE6611 DPO4EMBD **$1,300.00**

RS-232 Serial Triggering and Analysis Module
No. 767TE5486 DPO4COMP **$1,300.00**

HDTV and Custom Video Trigger
No. 767TE5487 DPO4VID **$790.00**

Soft Transit Case

No. 767TE404
(ACD4000) ..**$188.00**

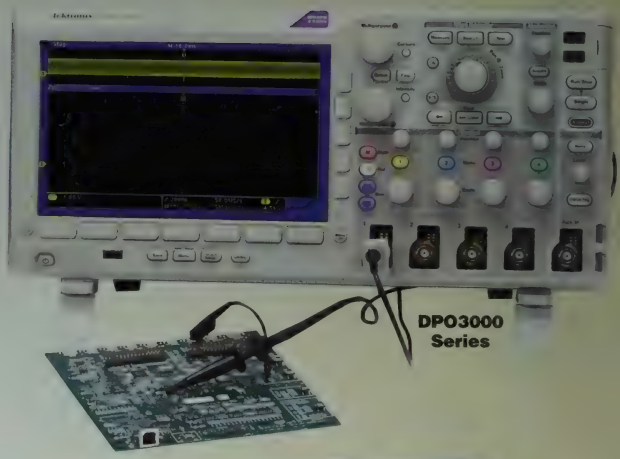
New!

Rackmount Kit

No. 767TE4444
(RM4000) **$700.00**

Tektronix® 3000 SERIES OSCILLOSCOPES

Feature-rich tools for debugging designs!



DPO3000 Series

DPO3000 Series

Delivers the performance you need to visualize even your most demanding signals. Bandwidths from 100 MHz to 500 MHz and a minimum of 5x over-sampling on all channels and sin(x)x interpolation standard allow faster capture of transient events. 5M record length on all channels lets you capture long windows of signal activity and maintain fine timing resolution. 50,000 wfm/s waveform capture rate maximizes the probability of capturing elusive glitches and other infrequent events.

TDS3000C Series

Now updates with new features and applications. WaveAlert™ monitors incoming signals on all channels and highlights any waveform that deviates from the others. Use e*Scope and the built-in Ethernet port to control your oscilloscope using the internet. The CPU clock rate has been doubled and new measurements have been added.
Now includes TDS3FFT application module with four FFT windows (Rectangular, Hamming, Hanning and Blackman- Harris) and TDS3TRG application module, which adds an advanced trigger menu.

TDS3000C Series

Compare Features

Model	DPO3000	TDS3000C
Bandwidth	100 MHz - 500 MHz	100 MHz - 500 MHz
Record Length	5 M	10 kB
Sample Rate	2.5 GS/s	1.25 GS/s - 5 GS/s
Rise time	3.4 ns - 700 ps	3.5 ns - 700 ps
Channels	2, 4	2, 4
Applications	Embedded Design and Debug, Investigation of Transient Phenomena, Power Measurements, Video Design and Debug, Automotive Electronics Design and Debug	Digital Troubleshooting, Video Installation and Service, Power Supply Design, Education and Training
Trigger Types	Edge, Sequence, Logic, Pulse, Width, Runt, Set-up and Hold, Rise/Fall Time, Video, Extended Video (opt.), I2C (opt.), SPI (opt.), RS-232/422/485/UART (opt.), CAN (opt.), LIN (opt.)	Edge, Logic, Pulse, Video, Extended Video (opt.), Comm (opt.)
Connectivity	RS-232, GPIB (opt.), CompactFlash© Mass Storage (4000 Series), LAN; May Include USB, PCMCIA, CD-ROM; Open access to OpenChoice© platform, NI LabVIEW SignalExpress™	RS-232, GPIB (opt.), CompactFlash© Mass Storage (4000 Series), LAN; May Include USB, PCMCIA, CD-ROM; Open access to OpenChoice© platform
Application Specific Solutions	I²C, SPI, RS-232/422/485/UART, CAN, LIN	Telecomm Mask Testing, Limit Testing, Video, Comm
Waveform Math and Analysis	Simple waveform math, Advanced waveform math, FFT or spectral, Compatibility with Windows analysis and productivity software	Simple waveform math, FFT standard, plus Arbitrary Expression Math (optional)
Other Features	Large 9 in. WVGA color widescreen display, Small footprint (5 in. (127 mm), Wave Inspector® waveform management, Front panel USB, Plug-and-play PC connectivity, TekVPI® probe interface	Simple navigation and familiar operation, Dedicated front-panel controls, Portable design for easy transport from lab-to-lab, Battery operation up to 3 hours, Front panel USB

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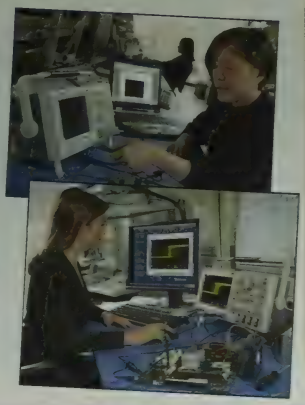
Tektronix® 3000 SERIES OSCILLOSCOPES

Feature-rich tools for debugging mixed signal designs

See more and solve faster with Tektronix DPO3000 Series oscilloscopes. Wave Inspector® controls combined with a first-in-class widescreen display helps you quickly search, navigate and see more horizontal on-screen data, so you can catch glitches you might otherwise have missed. And when it comes to serial debug, you can trigger, decode, and search on a host of common standards, including I2C, SPI, CAN, LIN, and more.

Performance you need at a price you can afford

With bandwidths up to 500 MHz, the Tektronix TDS3000C Series oscilloscopes provide you with affordable performance in a compact, battery-capable design. This popular Series, now equipped with USB host port and PC connectivity software, also provides you with familiar operation and simple navigation so you spend less time learning and re-learning how to use your oscilloscope and more time on the task at hand.



DPO3000 Applications

- Embedded Design and Debug
- Investigation of Transient Phenomena
- Power Measurements
- Video Design and Debug
- Spectral Analysis
- Automotive Electronics Design and Debug
- Manufacturing Test and Quality Control
- Electro-mechanical Design and Analysis
- Bio-medical Product Development
- Industrial Control

TDS3000 Applications

- Digital Design and Debug
- Video Installation and Service
- Power Supply Design
- Education and Training
- Telecommunications Mask Testing
- Manufacturing Test
- General Bench Testing

Available Models

Model	DPO3054	TDS3054C	DPO3052	TDS3052C	DPO3034	TDS3034C	DPO3032	TDS3032C	DPO3014	TDS3014C	DPO3012	TDS3012C
TT No.	767TE3541	767TE0354	767TE3520	767TE0352	767TE3340	767TE0334	767TE3320	767TE0320	767TE3140	767TE0314	767TE3120	767TE0312
TT GSA No.	–	767TE0354GSA		–	–	767TE0334GSA	–	767TE0320GSA	–	–	–	–
Channels	4	4	2	2	4	4	2	2	4	4	2	2
Bandwidth	500 MHz	500 MHz	500 MHz	500 MH	300 MHz	300 MHz	300 MHz	300 MHz	100 MHz	100 MHz	100 MHz	100 MHz
Record Length	5 M	10 k	5 M	10 k	5M	10 k	5 M	10 k	5 M	10 k	5 M	10 k
Sample Rate	2.5 GS/s	5.0 GS/s	2.5 GS/s	5.0 GS/s	2.5 GS/s	5.0 GS/s	2.5 GS/s	5.0 GS/s	2.5 GS/s	5.0 GS/s	2.5 GS/s	5.0 GS/s
PRICE	$10900.00	$9990.00	$9250.00	$8350.00	$7700.00	$6950.00	$6400.00	$5800.00	$5350.00	$4800.00	$4450.00	$4000.00
With 5 Year Calibration	–	767TE0355	–	767TE0353	–	767TE0335	–	767TE0321	–	767TE0315	–	767TE0313
PRICE	–	$10875.00	–	$9235.00	–	$7835.00	–	$6585.00	–	$5685.00	–	$4885.00

DPO3000 Series Options & Accessories

DPO3AUTO - Automotive bus serial triggering and analysis module enables triggering on packet level information on CAN and LIN buses.
No. 767TE3125 ..... **$990.00**

DPO3EMBED - Embedded bus serial triggering and analysis module enables triggering on packet level information on I2C and SPI buses.
No. 767TE3126 ..... **$990.00**

SIGEXPTE - NI LabVIEW SignalExpressTM Tektronix edition software enables true USB plug-and-play connectivity for the MSO4000, DPO4000, DPO3000, TDS2000B and TDS1000B Series Oscilloscopes and AFG3000 Series Arbitrary/ Function Generators. Quickly start measuring with an intuitive drag-and-drop interface that does not requires no programming.
No. 767TE0101 ..... **$699.00**

DPO3COMP - Computer bus serial triggering and analysis module enables triggering on packet level information on RS232/422/485/UART buses.
No. 767TE3127 ..... **$990.00**

DPO3VID - HDTV and custom video triggering module.
No. 767TE3128 ..... **$625.00**

TPA-BNC - Enables existing TekProbe® products to be used with new TekVPI™ probe interface.
No. 767TE3130 ..... **$395.00**

TEK-USB-488 - Enables communication between a GPIB bus controller and the USB port of a USBTMC-USB488 compliant Tektronix instrument.
No. 767TE488 ..... **$605.00**

TDS3000C Series Accessories & Software

A. Rechargeable Lithium Ion Battery
No. 767TE3303
(TDS3BATC) $520.00

B. Fast Charger form Battery Pack
No. 767TE064
(TDS3CHG) $141.00

C. Soft Carry Case
No. 767TE061
(AC3000) $190.00

D. Rack Mount Kit
No. 767TE062
(RM3000) $365.00

TDS3VID Extended Video Module
Adds Video QuickMenu. Autoset. Holdoff, Line Count Trigger, Video picture mode; vectorscope mode; HDTV format triggering; Graticules and more.
No. 767TE059
(TDS3VID) $550.00

TDS3GV Communications Module
Provides GPIB, VGA and RS-232 interfaces for easy connectivity. Includes TDSPC1 OpenChoice™ software.
No. 767TE235 (TDS3GV) $476.00

Tektronix® New! 2000 SERIES OSCILLOSCOPES

DPO2000 Series

DPO2000 Series

The first entry-level oscilloscopes to provide 1M points of usable record length on all channels, serial trigger and decode analysis options, and a variable low-pass filter that also allows you to see signal details to the oscilloscope's full bandwidth – all in a compact form factor. Up to 200-MHz bandwidth and 1 GS/s sample rate delivers all the power you need for mixed-signal debug. And it also offers advanced features like Wave Inspector for navigating long records and automatic decode of series buses.

MSO2000 Series

Adds 16 integrated digital channels so you can visualize and time correlate analog and digital signals on a single instrument. This integration extends triggering functionality across all 20 channels – ideal for debugging mixed analog and digital designs.

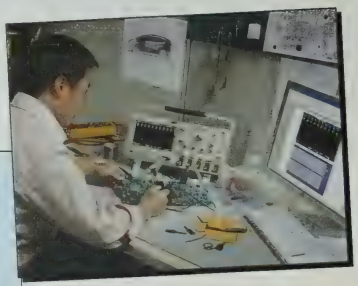
MSO2000 Series

Features:

- I²C, SPI, CAN, LIN and RS-232/422/485/UART serial triggering, decode and analysis options
- Parallel bus trigger and analysis (MSO2000)
- Multichannel setup and hold triggering (MSO2000)
- Advanced digital waveform display (MSO2000). Logical highs are color coded and waveform grouping simplifies positioning waveforms on screen.
- 5,000 wfm/s maximum waveform capture rate
- Suite of advanced triggers
- Wave Inspector navigation and search feature provides unprecedented efficiency in waveform analysis
- 7" widescreen TFT-LCD color display
- USB 2.0 on front panel for quick, easy data storage
- USB 2.0 device port on back for PC link up
- Plug n' Play PC connectivity

Includes: P221 200 MHz 1x/10x passive probe per analog channel, user manual, OpenChoice® desktop software, NI labVIEW SignalExpress™ Tektronix Edition LE software, calibration certificate, cord. ***3-Year Warranty.***

MSO2000 models also include: P6316 16-channel logic probe and accessory kit and bag.



Optional LAN and VGA video ports! -
Connect your oscilloscope to your network to remotely control and collect data. Display your screen on an external monitor or projector.

Only 5.3 Inches Deep!
Free up valuable space on your bench or desktop.

Available Models

Model	DPO2012	DPO2014	DPO2024	MSO2012	MSO2014	MSO2024
TT No.	767TE2212	767TE2214	767TE2225	767TE2312	767TE2314	767TE2325
Bandwidth	100 MHz	100 MHz	200 MHz	100 MHz	100 MHz	200 MHz
Channels	2	4	4	2	4	4
Digital Channels	–	–	–	16	16	16
Sample Rate	1.0 GS/s	1.0 GS/s	1.0 GS/s	1.0 GS/s	1.0 GS/s	1.0 GS/s
Record Length	1 M points	1 M points	1 M points	1 M points	1 M points	1 M points
Input Impedance	1 MΩ +2%, 11.5pF +2pF	1 MΩ +2%, 11.5pF +2pF	1 MΩ +2%, 11.5pF +2pF	1 MΩ +2%, 11.5pF +2pF	1 MΩ +2%, 11.5pF +2pF	1 MΩ +2%, 11.5pF +2pF
PRICE	$2,580.00	$3,100.00	$3,730.00	$3,580.00	$4,300.00	$5,150.00

DPO/MSO 2000 Series Accessories

P2221 200MHz Passive Probe with 1x/10x attenuation switch
No. 767TE2221.....$104.00

Rackmount Kit Standard 19" wide rack utilizing 4 rack units (RMD2000)
No. 767TE2020.....$415.00

Soft case with padded handle and shoulder strap
No. 767TE121.....$190.00

Tektronix® TDS2000B SERIES OSCILLOSCOPES

Best Seller

COLORFUL PERFORMANCE at a black & white PRICE!

TDS2000B Series

Features:

- Removable data storage via front panel USB port
- Seamless PC connectivity via USB device port and OpenChoice and NI SignalExpress PC software
- Advanced triggers including pulse width trigger and line-selectable video trigger
- FFT standard

An unbeatable combination of performance, full color display, ease-of-use and affordability in an ultra lightweight portable instrument. With up to 200 MHz bandwidth and 2 GS/s maximum sample rate, no other color oscilloscope offers as much for the money. You get accurate real-time acquisition up to the full bandwidth, advanced triggers to isolate signals of interest, and 11 standard automatic measurements. Waveform capture is quick and easy, and the USB ports make data transfer simple.

TDS2000B Series

Operator Training Kit for TDS1000, TDS2000, TDS3000B/C Series Oscilloscopes

New!

Extensive instructions and step-by-step lab exercises lets users master TDS1000B, TDS2000B and TDS3000C Series oscilloscopes at their own pace. **Kit Includes:** CD-based manual and signal source board, battery, EM1 filter, Static susceptibility Doc and EMI ferrite filter, installation information (for wall power).
No. 767TE0000 .....**$350.00**

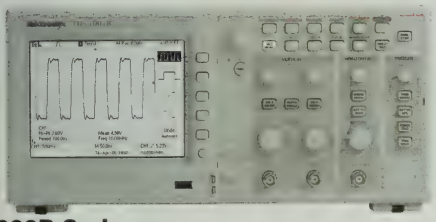
Available Models

Model	TDS2002B	TDS2004B	TDS2012B	TDS2014B	TDS2022B	TDS2024B
TT No.	767TE2202	767TE2244	767TE2112	767TE2140	767TE0222	767TE0224
Display	Color LCD	Color LCD	Color LCD	Color LCD	Color LCD	Color LCD
Bandwidth	60 MHz	60 MHz	100 MHz	100 MHz	200 MHz	200 MHz
Channels	2	4	2	4	2	4
Sample Rate on each channel	1 GS/s	1 GS/s	1 GS/s	1 GS/s	2 GS/s	2 GS/s
Record Length	2.5K points on all models					
Vertical Resolution	8-bits					
Vertical Sensitivity	2mV to 5V/div on all models with calibrated fine adjustment					
DC Vertical Accuracy	±3% on all models					
Max Input Voltage	300V, CAT II; derated at 20dB/decade above 100 kHz to 13Vp-p AC at 3 MHz and above					
Time Base Range	5ns to 50 sec/div	5ns to 50 sec/div	5ns to 50 sec/div	5ns to 50 sec/div	2.5ns to 50 sec/div	2.5ns to 50 sec/div
PRICE	**$1,320.00**	**$1,730.00**	**$1,610.00**	**$2,080.00**	**$1,940.00**	**$2,410.00**

Includes**: P2220 200-MHz 10X-1X switchable passive probes (one per channel). User manual. Power cord. NIM/NIST-traceable certificate of calibration. **Three-Year Warranty.

Tektronix® TDS1000B SERIES OSCILLOSCOPES

Superior Performance Starting at just... **$900.00**



TDS1000B Series

You get virtually all the features of the TDS2000B series above, except a monochrome monitor, at a price that makes it affordable to give every engineer their own instrument.

Available Models

Model	TDS1001B	TDS1002B	TDS1012B
TT No.	767TE1100	767TE1101	767TE1021
Display	Black & White	Black & White	Black & White
Bandwidth	40 MHz	60 MHz	100 MHz
Channels	2	2	2
Sample Rate on each channel	500 MS/s	1 GS/s	1 GS/s
Record Length	2.5K points on all models		
Vertical Resolution	8-bits		
Vertical Sensitivity	2mV to 5V/div on all models w/calibrated fine adjustment		
DC Vertical Accuracy	±3% on all models		
Max Input Voltage	300V, CAT II; derated at 20dB/decade above 100 kHz to 13Vp-p AC at 3 MHz and above		
Time Base Range	5ns to 50 sec/div	5ns to 50 sec/div	5ns to 50 sec/div
PRICE	**$900.00**	**$1,100.00**	**$1,320.00**

Includes**: P2220 200-MHz 10X-1X switchable passive probes (one per channel). User manual. Power cord. NIM/NIST-traceable certificate of calibration. **Three-Year Warranty.

TDS2000B & TDS1000B Series Accessories

Soft carrying case
No. 767TE2121 (AC2100) **$95.00**

Hard carrying case
No. 767TE4321 (HCTEK4321).....**$655.00**

Rackmount kit
No. 767TE2003 (RM2000B).....**$313.00**

Tektronix®

TPS2000 Series
Digital Storage Oscilloscopes

COMPACT and VERSATILE enough for technicians in the field the entire day!

Up to 200 MHz Bandwidth!

TPS2000 oscilloscopes are versatile, portable instruments. Ideal for engineers who need differential measurements up to 30V rms floating, and with the BND power option, it's perfect for industrial power designers, installation and maintenance engineers who regularly confront high voltages up to 600V, CAT II or 300V, CAT III floating. With the optional 767TE6666 power measurement software you can now use a single instrument to make a broad range of measurements from measuring high voltages and high currents to debugging control circuits. With two batteries, it allows 8-hours of operation and enables you to take measurements in the field for an entire day.

Features:

- 100 MHz & 200 MHz Bandwidth
- 2-or 4- Isolated Floating Channels
- Isolated External Trigger Input
- Integrated Mass Storage
- 1 or 2GS/s Sample Rate
- Color Display (1/4 VGA LCD)
- Portable - weights 6 lbs. (without battery)
- 8 Hours of Continuous Battery Operation (with the use of 2 batteries)
- Hot Swappable Batteries (Provide freedom from an AC Power source)
- FFT Standard on all Models
- Built in I/O Interface
- 11 Automatic Measurements
- Waveform and set up Memories
- Autoset
- Simplify Setup
- Advanced Triggers n Backlit Menu buttons
- Context Sensitive Help
- *3-Year Warranty*

Standard Accessories

- Probes – P2220 200 MHz, 1X/10X switchable passive probe, (one per channel)
- (1) Battery – Lithium-ion with fuel gauge
- TDSPCS1 OpenChoice™ Software
- PC connectivity software
- AC Adapter and power cord
- NIM/NIST – Traceable certificate of calibration

Options:

Power Measurement & Analysis Software
Instantaneous power waveform analysis, harmonics analysis, switching loss, phase angles, dv/dt and di/dt cursors.
No. 767TE6666 (TPS2PWR1).....**$510.00**

Power Bundle for TPS Series Oscilloscope
Includes: (4) 767AC102 P5120 Passive high voltage probes and (1) 767TE6666 TPS2PWR1 power measurement and analysis software package
No. 767TE6667 (TPS2PBND) **$1,690.00**

Additional Battery
No. 767TE0022.....**$240.00**

Battery Charger
No. 767TE0021.....**$418.00**

JUST THE FACTS

Model	TPS2012	TPS2014	TPS2024
TT No.	767TE2102	767TE4102	767TE4202
Channel	2-Isolated	4-Isolated	4-Isolated
Bandwidth MHz	100 MHz	100 MHz	200 MHz
Sample Rate (GS/s) Per Channel	1.0 GS/s	1.0 GS/s	2.0 GS/s
Record Length	2.5 K points on all models		
Vertical Resolution	8-bit (normal or with averaging)		
Vertical Sensitivity	2 mV to 5V/div on all models with calibrated fine adjustment		
Vertical Accuracy	±3% on all models		
Vertical Zoom	Vertically expand or compress a live or stopped waveform		
Automatic Measurements	11		
Isolated External Trigger Input	Yes on all models		
Position Range	2 mV to 200 mV/div ±2V; >200 mV to 5 V/div ±50 V		
Bandwidth Limit	20 MHz for all models		
Linear Dynamic Range	±5 div		
Time Base Range	5 ns to 50 s/div	5 ns to 50 s/div	2.5 ns to 50 s/div
Time Base Accuracy	50 ppm		
Input Impedance	1MΩ ±2 % in parallel with 20 pF		
Input Coupling	AC, DC, GND on all models		
Horizontal Zoom	Horizontally expand or compress a live or stopped waveform		
FFT	Standard on all models		
RS-232, Centronics - Parallel Ports	Standard on all models		
PC Connectivity	Standard on all models		
Integrated CompactFlash Mass Storage	Standard on all models		
PRICE	$2,890.00	$3,190.00	$3,490.00

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Tektronix® PROBE CROSS-REFERENCE FOR ALL MODELS

Active Probes

TT No.	Tektronix Model	Cable Length	Attenuation	Bandwidth at -3dB in MHz	Input C in pF	Input R in Ohms	Linear Dynamic Range in Volts	Max. DC Offset Range in Volts	Voltage (DC+pk AC)	Compatible Instruments	PRICE
767AC6205	P6205	1.5m	10X	750	<2	1M	±10.0	N/A	±40	11000; TDS500/600; TDS3000/5000/7000	$1,070.00
767TE246	P6245	1.3m	10X	1500	1	1M	±8.0	±10.0	±15	11000; TDS500/600; TDS5000/7000	$1,880.00
767TE1500	TAP1500	1300mm	10X	N/A	<1	1MΩ	±8.0	±10.0	±15	DPO7000, DPO4000, MSO4000	$1,910.00

Differential Probes

TT No.	Tektronix Model	Attenuation Gain	Bandwidth at -3dB in MHz	Input C in pF/ Input R in Ohms	Differential Input Voltage	Common Mode Input Voltage	Max. Non Destructive Voltage (DC + pk AC)	Compatible Instruments	PRICE
767TE247	P6246	1X/10X	400 MHz	1pF/100k ohms (differential) 2pF/200k ohms (common)	±850mV/ ±8.5V	±7V/±7V	±25V	TDS700/5000: TDS11000 Series	$2,760.00
767TE624	P6247	1X/10X	1 GHz	1pF/100k ohms (differential) 2pF/200k ohms (common)	±850mV/ ±8.5V	±7V/±7V	±25V	TDS700/5000: TDS11000 Series	$3,900.00
767TE6248	P6248	1X/10X	1.7 GHz(typical) 1.5 GHz (guaranteed)	1pF/100k ohms (differential) 2pF/200k ohms (common)	±850mV/ ±8.5V	±7V/±7V	±25V	TDS700/5000: TDS11000 Series	$4,800.00
767AC203	P5200	50X/500X	25 MHz	7pF/4M ohms	1300Vrms	1000Vrms	1300Vrms (differential)	All; Except TPS2000	$780.00
767TE208	P5205	50X/500X	100 MHz	7pF/4M ohms	1300Vrms	1000Vrms	1300Vrms (differential)	TDS3000/5000: 1100 Series	$1,150.00
767TE521	P5210	100X/1000X	50 MHz	7pF/8M ohms	4400Vrms	2200Vrms	4400Vrms (differential)	TDS3000/5000: 1100 Series	$2,300.00
767AC400	ADA400A	.1X/1X	1 MHz	55pF/1M ohm	±0.1V/±1V	0.01V, 1V, 10V, 80V	±40V (common)	TDS5000/7000: 1100 Series	$1,510.00

Passive Probes

TT No.	Tektronix Model	Cable Length	Attenuation	Bandwidth at -3dB	Resistance	Input C	Max. Voltage DC + Peak AC	Compensation Range	Read Out	PRICE
767AC101	P6101B	2m	1X	15MHz	1MΩ	100pF	300V	NA		$146.00
767TE186	P3010	2m	10X	100MHz	10MΩ	13pF	420Vrms	15 to 35pF	X	$151.00
767TE5050	P5050	1.3m	10X	500MHz	10MΩ	11.1pF	300Vrms	16 to 22pF	X	$385.00
767ME6109	P6109B	2m	10X	100MHz	10MΩ	13pF	420V	15 to 35pF	X	$162.00
767TE211	P6112	2m	10X	100MHz	10MΩ	13.3pF	300Vrms	15 to 35pF		$157.00
767AC114	P6114B	2m	10X	400MHz	10MΩ	14.1pF	300Vrms	10 to 35pF	X	$386.00
767TE117	P6117	2m	10X	200MHz	10MΩ	13.3pF	300Vrms	15 to 35pF		$188.00
767AC6131	P6131	1.3m	10X	300MHz	10MΩ	10.8pF	500V	14 to 18pF	X	$365.00
767AC137	P6137	1.5m	10X	400MHz	10MΩ	10.8pF	500V	12 to 18pF	X	$385.00
767AC6138	P6138A	1.3m	10X	400MHz	10MΩ	10pF	300Vrms	12 to 18pF	X	$345.00
767AC139	P6139A	1.3m	10X	500MHz	10MΩ	8pF	300Vrms	8 to 12pF	X	$375.00
1X/10X Switchable										
767TE2220	P2220	1.5m	1/10X	6/200MHz	1/10MΩ	110/17pF	300Vrms Cat II	15 to 25pF		$104.00
100X/1000X High Voltage										
767AC100	P5100	3.1m	100X	250MHz	10MΩ	2.75pF	2500V	7 to 30pF	X	$390.00
767AC015	P6015A	3.0m	1000X	75MHz	100MΩ	3.0pF	20,000V	7 to 49pF		$1,520.00
50 Ohms Divider Probes										
767TE158	P6158	1.2m	20X	±3GHz	1kΩ	1.5pF	22Vrms	50 Ohms	X	$460.00

AC Current Probe

TT No.	Tektronix Model	Length	Bandwidth	Peak	Resistance	Passive Termination	PRICE
767AC021	P6021	5	120Hz to 60Hz	15 A	1mΩ	Switchable 2mA/mV or 10mA/mV	$1,300.00

General Purpose Current Probe

TT No.	Tektronix Model	Frequency Range	Current Range RMS to Peak	Max Conductor	Termination	Instrument Compatibility	PRICE
767AC622	A622	DC to 100KHz	50mA to 100A	11.8mm dia.	BNC (w/banana Adapter)	Scope/Dmm/Tekmeter®	$525.00
767TE2229	TCP202	DC to 50 MHz	10mA to 50A	3.8mm (0.15 in.)	N/A Probe hooks right into scope via the TEKPROBE interface	DPO4000/MSO4000, TDS3000C	$1,830.00

Differential Preamplifier

TT No.	Tektronix Model	Features/Benefits	Applications	Instrument (If Appliciable)	PRICE
767AC400	ADA400A	Active differential preamplifier 10 µV/div sensitivity. Typically 100 db CMRR DC to 10 kHz	Mechanical analysis; Audio design; Biomedical research; Medical equipment	DPO4000/MSO4000; TDS3000B	$1,510.00

Agilent Technologies
Authorized Distributor

New!

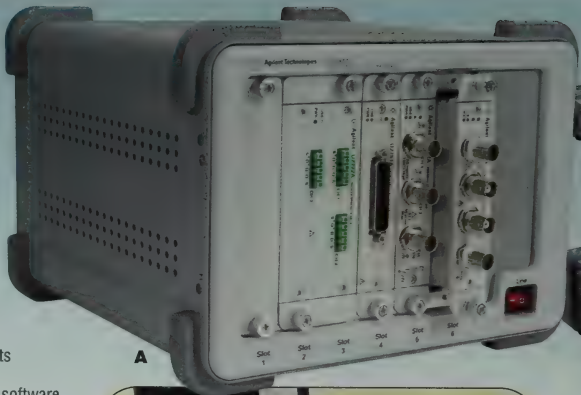
Versatile, affordable, fast to set-up!

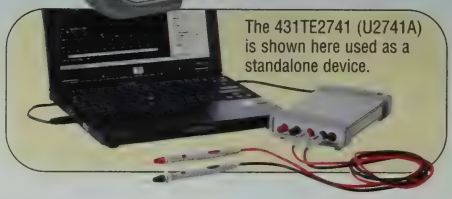
USB Modular Instruments

A new family of instrument modules including an oscilloscope, function generator, source measure unit, switch matrix and DMM you can use separately or in a card cage.

Features:

- Shorter time to make measurements
- Simple USB interface to PC
- Bundled, easy-to-use, full-featured software
- Adapts easily to your needs, affordable to add on when you need to





The 431TE2741 (U2741A) is shown here used as a standalone device.

Available Agilent Modules (can be mixed and matched):

100 or 200 MHz USB oscilloscope features sampling rates up to 1 GS/a/s to enhance troubleshooting tasks such as circuit-board power-up sequence, in-rush current and frequency.

20MHz USB function generator produces sine, square, triangular, pulse, ramp, exponential, modulated and arbitrary waveforms for electronic functional testing and troubleshooting.

Three channel USB source/measure unit offers four-quadrant source and measurement capabilities for parametric tests including test point measurement, current and voltage source/measure, and resistance measurement.

32-channel UBS switch matrix features a four-by-eight, two-wire design that provides additional test points for functional tests. Key specifications include crosstalk of less than -30 dB at 45 MHz and insertion loss of just 4.5 dB.

Card Cage
A. No. 431TE278 .....$1,186.00

100 MHz Oscilloscope USB Module
B. No. 431TE2701 .....$1,329.00

200 MHz Oscilloscope USB Module
No. 431TE2702.....$1,638.00

Source Measure USB Module
C. No. 431TE2722 .....$2,165.00

Switch Matrix USB Module
D. No. 431TE2751 .....$936.00

Function Generator USB Module
E. No. 431TE2761.....$1,650.00

5.5 Digit Digital Multimeter USB Module
F. No. 431TE2741.....$1,040.00

PROBE MASTER Oscilloscope Lead Kits

Heavy-Duty Oscilloscope Probes

Features a fully-enclosed, snap-on, rotating ground lead, and a "screw-in" replaceable tip. The switchable model allows for quick finger tip changes between probes. The probe body is made of high impact ABS. Soft, molded strain reliefs at all stress points insure long cable life. Contains three probes (x1/x10 and switchable ground) in a case, plus sprung hook, ground leads, spare tips and tip covers 200 MHz. **(USA)**
No. 665TE411 .....$156.95

100 MHz Heavy-Duty Probe Kit - 12 pc

This oscilloscope probe kit contains: three probes (x1/x10 and switchable probe) sprung hooks, ground leads, trimmer tool and a 4" extender tip. The probes feature a snap-on, rotating ground lead and a heavy-duty fixed tip. In protective case. **(USA)**
No. 665TE391.....$119.45

250 MHz Gold Probe Master Kit - 25 pc

The gold-plated probe tips, sprung hook, ground lead, alligator clip and other critical interconnect points within the gold probe provide excellent contact for probing low-level analog and high-speed digital data signals. Features: three probes (x1/x10 and switchable probe), sprung hooks, 6" & 12" ground leads, replaceable tips, .025" wire wrap adapters, 4" long extender tip, pincer hook and many other accessories. **(USA)**
No. 665TE915 .....$174.60

BK PRECISION® *Full-featured oscilloscopes that won't break your budget!* New!

Digital Oscilloscopes

Digital oscilloscopes with analog style controls and auto functions for easy use. Advanced triggering, automatic measurements and FFT functions allow you to debug your circuits easily. Model 2534 also features digital filtering, waveform recording, delayed sweep/zoom, and mask testing.

310TE2530

310TE2532

310TE2534

Features:

- 2 channels
- 4000 point record length for each channel
- 24 (Models 2534, 2540 & 2542) or 11 (Models 2530 & 2532) automatic measurements
- Multi-language interface
- USB interface
- PC software allows control via virtual front panel and transfer to PC (Models 2534, 2540 & 2542)
- Extensive triggering capabilities including pulse width and line-selectable video trigger (Models 2534, 2540 & 2542)

310TE2540

310TE2542

Model	2530	2532	2534	2540	2542
TT No.	**310TE2530**	**310TE2532**	**310TE2534**	**310TE2540**	**310TE2542**
Bandwidth	25 MHz	40 MHz	60 MHz	60 MHz	100 MHz
Real Time Sample Rate	250 MSa/s	500 MSa/s (2 channels interleaved)	400 MSa/s (2 channels interleaved)	1 GSa/s	1 GSa/s
Display	5.7" monochrome LCD	5.7" color LCD	5.7" color LCD	5.7" color LCD	5.7" color LCD
Rise Time	<14 ns	<8.8 ns	<5.83 ns	<5.83 ns	<3.5 ns
Max Input Voltage	300 Vrms, CAT II (between signal and reference BNC connector)		400 Vpk, CAT II (between signal and reference BNC connector)		
Includes	10:1 probe set (2 pieces), Power cord, USB interface cable, EasyScope software, User manual.		(2) 150 MHz 10:1 passive probes (Model PR 37A), Power cord; USB interface cable; Comsoft software, User manual		
Warranty	One Year	One-Year	Two-Year	Two-Year	Two-Year
PRICE	**$499.00**	**$699.00**	**$799.00**	**$940.00**	**$1155.00**

Tektronix® AC/DC Current Measurement System

- AC/DC Measurement Capabilities
- AC/DC Input Coupling
- Low Insertion Impedance Reduces Device Under Test Loading
- Split Core Construction Allows Easy Circuit Connection
- Small Mechanical Package-Less Desktop Space, Easier Storage and Handling
- Status Indicators Provide Notification of Potential Error Conditions
- Lower DC Drift and Noise

Ideal for use in development and analysis for power supplies, semiconductor devices, power inverters/converters, electronics ballasts, industrial/consumer electronics mobile communications, motor drives, transportation systems and more. The split core probes incorporate both transformer and Hall effect to provide broad bandwidth measurement capabilities from DC up to 100 MHz at current levels as low as 1 mA to thousands of amps (when used with CT4 current transformer). When connected to TDS oscilloscopes with TEKPROBE Level II or TekConnect (w/TCA-BNC) interfaces, current measurements and calculations are simple and easy. **Includes:** Instruction/service manual, TekProbe Interface Cable, Male-to-Male BNC cable (50 Ohms), 50 Ohms feed-through termination and Certificate of Traceable Calibration.

TCPA300 Amplifier
No. 767TE987 .....$1,930.00

TCPA400 Amplifier
No. 767TE0404 ....$1,930.00

TCP312 Probe: AC/DC Current, DC to 100 MHz; 30A DC
No. 767TE023 .....$1,420.00

TCP305 Probe: AC/DC Current, DC to 50 MHz; 50A DC
No. 767TE335 .....$1,200.00

TCP303 Probe: AC/DC Current, DC to 15 MHz; 150A DC
No. 767TE443 .....$2,300.00

TCP404XL Probe: AC/DC Current, DC to 2 MHz; 750A DC
No. 767TE4004 ....$3,130.00

Agilent Technologies
Authorized Distributor

AC/DC Current Probes

431TE2779

431TE2780 431TE2781 431TE2782 431TE2782

Hybrid technology that includes Hall-effect sensor and AC current transformer. Provides accurate measurement of DC or AC currents up to 500 Arms or DC-100 MHz without breaking into circuit. Split core construction lets probe slip easily on conductor. For any oscilloscope with a 1 MΩ BNC input including Agilent 3000, 6000 and 8000 Series. **Features:** Overload protected; Direct connection to high-impedance 1 MΩ BNC scope input; Demagnetize button removes residual magnetism; External power supply provides connection to three current probes.

3-Channel Power Supply for Probes
No. 431TE2779 ....$1,041.00

2 MHz/500A AC/DC Current Probe
No. 431TE2780 ....$4,430.00

10MHz/150A AC/DC Current Probe
No. 431TE2781 .....$3,689.00

50MHz/30A AC/DC Current Probe
No. 431TE2782 ....$2,423.00

100 MHz/30A AC/DC Current Probe
No. 431TE2783 ....$2,742.00

Best Seller **Speed, Performance and Analysis power!**

FLUKE

Features & Specs. for all Models:

- **Channels:** 2 + External/DMM Input isolated & ground
- **Horizontal Accuracy:** 0.01%
- **Vertical Sensitivity:** 2mV/div to 100V/div
- **Glitch Capture:** 50 nsec
- **Autoscope Measurements:** 26
- **Memory:** 2/100 screen
- **Auto Capture of 100 screens:** Yes, with replay capability
- **Max Record Length:** 27,500 points per input (10ms/div to 2 min/div)
- **WF Memory (Screens/Setups):** 10/10
- **Trigger Types:** Connect-and-View™ automatic triggering and a full range of manual trigger modes.

ScopeMeter® 190B Series

The Fluke ScopeMeter® 190 series high-performance oscilloscopes feature 60MHz to 200MHz bandwidth, 2.5 GS/s real-time sampling and a deep memory for engineers who need the full capabilities of a high-performance scope in a handheld, battery powered instrument. Waveform Storage 2 forms: 10 sec WF, WF2. Safety certification: CAT II, 1,000V; CAT III, 600V. ***Three-Year Warranty.***

Medical ScopeMeter® 190 Series

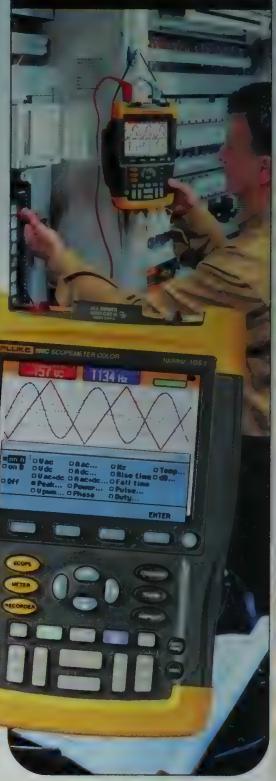
High-performance oscilloscopes with x-ray, MRI, nuclear medicine and ultrasound modalities for servicing medical equipment and video systems. You get all of the features of the ScopeMeter® 190 Series, plus: mAs current-over-time measurement; smart averaging; extended offset; selectable persistence mode; and extended video triggering. Waveform Storage 2 forms: 10 sec WF, WF2. **Includes**: MS190 medical software extension; MA190 accessory kit; SCC190 software; Case; Universal power adapter. ***Three-Year Warranty.***

Color ScopeMeter® 190C Series

The full-color display makes identification of individual waveforms easier, particularly when displaying large amplitude or multiple overlapping waveforms on screen. On-screen color labels, measurements and warnings are clearly linked to specific waveforms. The high-resolution color screen and new digital persistence and fast display update rate mode gives you an even better view of complex waveforms in the most demanding trouble-shooting applications in the field. Safety certification: CAT III, 600V; CAT IV, 1000V. ***Three-Year Warranty.***

Upgrade Your 190C Series ScopeMeter®
If you have a 190C ScopeMeter® bearing serial numbers of DM8130238 or higher, you can upgrade to the new specifications with a free download available from Fluke. Lower serial numbered-units must be sent to a Fluke service center for upgrades.

True-RMS



Model	TT No.	Type	Bandwidth	Max. Real Time Sample Rate	Time Base Range	Additional Scopemeter Features	PRICE	Meter with Calibration TT No.	PRICE	Meter with SCC* TT No.	PRICE
Fluke	374TE2192 192B	High Performance	60 MHz	0.5 GS/s	10 ns/div to 2 min/div	5000 Counts Volts, Amps, Ohms, Continuity, Diode, Temperature	$2,520.00	374TE2195	$2,641.15	374TE3192	$2,980.00
Fluke	374TE2196 196B	High Performance	100 MHz	1 GS/s	5 ns/div to 2 min/div		$2,899.00	374TE2197	$3,019.40	374TE3196	$3,358.00
Fluke 196C Color*	374TE096	Color	100 MHz	1 GS/s	10 ns/div to 2 min/div	14.4 cm full color LCD with digital persistence; Pass/Fail testing	$3,020.00	–	–	374TE097	$3,479.00
Fluke 196BM	374TE4196	Medical	100 MHz	1 GS/s	5 ns/div to 2 min/div	mAs current-over-time measurement; smart avg; extended offset; selectable persistence mode; and extended video triggering.	$3,732.00	–	–	–	–
Fluke 196CM	374TE5196	Color Medical	100 MHz	1 GS/s	5 ns/div to 2 min/div		$3,878.00	–	–	–	–
Fluke 199B	374TE2199	High Performance	200 MHz	2.5 GS/s	5 ns/div to 2 min/div	5000 Counts Volts, Amps, Ohms, Continuity, Diode, Temperature	$3,207.00	374TE2200	$3,354.00	374TE3199	$3,697.00
Fluke 199C Color	374TE098	Color	200 MHz	2.5 GS/s	5 ns/div to 2 min/div	14.4 cm full color LCD with digital persistence; Pass/Fail testing	$3,389.00	–	–	374TE999	$3,853.00
Fluke 199BM	374TE4199	Medical	200 MHz	2.5 GS/s	5 ns/div to 2 min/div	mAs current-over-time measurement; smart avg; extended offset; selectable persistence mode; and extended video triggering.	$4,035.00	–	–	–	–
Fluke 199CM	374TE5199	Color Medical	200 MHz	2.5 GS/s	5 ns/div to 2 min/div		$4,237.00	–	–	–	–

**Meter with SCC Includes: Color Scopemeter, FlukeView® Software, PM9080 cable and case.*

True-RMS

Fluke® 125

CAT III, 600V

FLUKE.

Best Seller

Three-in-one simplicity!

ScopeMeter® 120 Series

The compact ScopeMeter 120 Series is the rugged solution for industrial troubleshooting and installation applications. It's a truly integrated test tool, with oscilloscope, multimeter and paperless recorder in one affordable, easy-to-use instrument. Find fast answers to problems in machinery, instrumentation, control and power systems.

Features

- Dual-input 40 MHz or 20 MHz digital oscilloscope
- Two 5,000 counts true-RMS digital multimeters
- Automatic measurements
- A dual-input TrendPlot™ recorder
- Connect-and-View™ trigger simplicity for hands-off operation
- Shielded test leads for oscilloscope, resistance and continuity measurements
- 10:1 Voltage Probe included with Fluke 124 and 125 for high frequency measurements
- Up to 7 hours battery operation
- 600 V CAT III safety certified
- Optically-isolated interface for PC connection
- Rugged, compact case
- Fluke 125 gives bus health and power measurements

Model	Fluke 125	Fluke 124	Fluke 123
TT No.	374TE1253	374TE1124	374TE023
Bandwidth	40 MHz	40 MHz	20 MHz
Dual input True RMS Meter	Vdc, Vac, Vac+Vdc, Ohms,Continuity , Diode-test, Current, °C, °F, Capacitance, dBV, dBM, Crest Factor, Touch Hold and Zeroset		
TrendPlot Recording	Automatic vertical scaling and time compression. Display the actual, MIN, MAX and AVG reading.		
Cursors	ΔT, 1/ΔT, V, ΔV, rise-and fall time	ΔT, 1/ΔT, V, ΔV, rise- and fall time	–
Real-time sample rate	25 MS/s		
Inputs and digitizers	2		
Memory	20 screens & setups	20 screens & setups	10 screens & setups
Trigger types	Connect-and-View™, Free Run, Single Shot, Edge, Video, External		
Electrical Safety	600V CAT III (EN61010-1)		
Size	232 x 115 x 50 mm		
Warranty	3 years parts and labor (one year on accessories)		
PRICE	$1,990.00	$1,672.00	$1,353.00

Fluke 125/003S ScopeMeter® w/SCC Kit
Includes: Power adapter; STL 120 test leads; BPL120MH (installed); VPS40 - 40 MHz probe; C120 Carrying Case; OC4USB cable; FlukeView Software; i400s Current Clamp. (Netherlands)
No. 374TE5303 125/S **$2,318.00**

$142 IN KIT SAVINGS!

Agilent Technologies

Authorized Distributor

Handheld Digital Oscilloscopes

Combines full-featured oscilloscope with 6000-count True RMS DMM and real-time scope in one go-anywhere instrument. Most functionality and performance in its class. Large 4.5" LCD color display lets you quickly identify signals from two channels. Up to 200MSa/s sample rate captures instantaneous and repetitive signal anomalies.

- Up to 40MHz bandwidth with advanced triggering
- 125,000 points/channel waveform memory depth
- 11 built-in measurement functions, including voltmeter, ohmmeter and auxiliary meter
- Zoom and Dual Waveform math functions. FFT function - U1604A.
- Remote control and data transfer through PC Link software
- USB 2.0 interface connectivity

Includes: (3) DMM Alligator clips, (2) DMM Hook clips, (2) DMM Ground alligator clips, AC adapter with power cable, Product reference CD-ROM, 1x Scope probe (CAT II, 300V), 10x Scope probe (CAT III, 600V), DMM Test lead, USB Interface package (CD-ROM + USB Cable) and NiMH battery pack 4500mA. ***Three-Year Warranty.***

431TE1602 66431TE1604

20 MHz Oscilloscope
No. 431TE1602 (U1602A) **$1,355.00**
40 MHz Oscilloscope
No. 431TE1604 (U1604A) **$1,692.00**

USB Hosts
No. 431TE1603 (U1602A).....**$151.00**
No. 431TE1605 (U1604A).....**$151.00**

Soft Case
No. 431TE1590 .....**$60.35**
100:1 CAT III 600V Probe
No. 431TE1562 .....**$151.00**

Tektronix

Heavy Duty!

Instrument Cart

We've made it easy for you to free up valuable workspace with this ergonomically designed, portable rack-width cart with a tilting top tray and storage drawer. Makes it convenient to share and move equipment and get closer to the device under test. **(USA)**

No. 767BE420 ....$1,020.00

Tektronix Instrument Carts

Free-up limited workbench space!

K4000 Mobile Workstation

- Three height-adjustable shelves and storage drawer
- Extended middle shelf pulls out or supporting keyboard and mouse.
- Skyhook for probe cable

Supports a varied combination of instruments, PC, printers and/or monitor. Sturdy structure and wheels enable you to move instruments as needed while monitor clips and instrument brackets provide stability. **Specs:** Shelf capacity: 100 lbs.; Overall Cart: 56"H x 25"W x 34-1/2"D; Top/Bottom Shelves: 20" W x 21"D; Middle Shelf: 24"W x 28-3/4"D.

No. 767TE4000 .....$1,520.00

Provides mobility for larger oscilloscopes.

K475 Workstation Tower

- Oversized shelf for larger oscilloscopes or keyboard support
- Steel and aluminum construction
- Four instrument restraining straps for stability

Designed for rackmount applications required in digital design, research and development, and manufacturing environments. Extra long middle shelf provides room for using a keyboard. **Specs:** Shelf capacity: 75 lbs. (35 lbs. for top shelf); Overall Cart: 55.7"H x 25"W; Top/Bottom Shelves: 20"W x 16-1/2"H; Middle Shelf: 20"W x 26.6"H.

No. 767TE475 .....$1,260.00

TECHNI-TOOL Oscilloscope Probe Kits

Monolithic Oscilloscope Probe Kit - 7 pc

Best Seller

Specs: Temp range: -15°C to 70°C; Compensation range: 15pF to 50pF; Attenuation: x1/x10; Input capacity: 75pF/11pF ± 10% accuracy; Bandwidth: 10/100 MHz; Working voltage: 600V DC (including AC peak). **Kit includes:** Test hook spring loaded, ground lead, trimmer tool, insulating tip and BNC adapter. **(USA)**

No. 758TE510 .....$29.80

Test Lead Starter Kit - 18 pc

Includes: 4mm straight to right-angle silicone leads, 1.5m (60"); Probe bodies w/Ø4mm contact tip; Fully insulated alligator clips; sprung hooks; 100 MHz oscilloscope probe x1/x10 /ref; BNC male to male cable assembly, 1.2m; BNC female to IC clip, breakout; insulate BNC male to 4mm jacks, adapter; BNC female to 4mm banana plug, adapter; BNC male to 4mm binding posts, adapter. ***One-Year Warranty.*** (France)

No. 758TE3030 .....$97.15

High Voltage Oscilloscope Probe

High operating voltage in a slim bodied probe. Attenuation: x100; Bandwidth: 150 MHz; Voltage: 2kV; 1.2M OAL. (France)

No. 758TE2459 .....$102.40

Oscilloscope Probe Kit - 25 pc

Contains: x1, x100 and x1/x10 switchable. Probe includes a sprung hook, replacement tip, ground lead, insulator caps, and BNC adapter. **Specs:** Pass-thru: Attenuation: x1; Input imp. 1R(M-), 46C(pf); Bandwidth: 15MHz; Risetime: 27nz; Max. input: 600 VDC; Switchable: Attenuation: x1/x10/REF; Bandwidth: 10/200 MHz; max. input: 600 VDC; X100: Attenuation: x100; Bandwidth: 250; Risetime: 1.4ns; Max. input: 1,200 VDC. ***One-Year Warranty.*** (France)

No. 758TE3033 .....$106.40

Coaxial Connectors Adapters & Probe Kits

Pomona ELECTRONICS

Best Seller

Maxi Universal Adapter Kit

Kit contains two each: BNC (m), BNC (f), TNC (m), TNC (f), SMA (m), SMA (f), "N" (m), "N" (f), UHF (m), UHF (f), Mini UHF (m), Mini UHF (f), "F" (m), "F" (f), RCA (m), RCA (f), six intermediate couplers, one double banana plug, one double binding post with banana jacks and one sampler. **(USA)**

No. 458TE5748.....$280.45

Pomona ELECTRONICS Universal Coaxial RF Adapter Kit

Contains two each: BNC (m), BNC (f), TNC (m), TNC (f), SMA (m), SMA (f), "N" (m), "N" (f), four intermediate couplers, one double banana plug and one double binding post with banana jacks. **(USA)**

No. 458TE698.....$173.35

Coax Adapter Kit

You can make 72 adapters: male-male, male-female and female-female in any combination of BNC, TNC, SMA, N, UHF & MINI-UHF. Kit contains two male & two female of all eight connectors plus six universal interfaces. All are gold plated & teflon insulated.

No. 771CO4030.....$310.40

Pomona BNC Male

BNC Male to MiniGrabber® Test Clips -
Rating: 300 VRMS; Cable type: RG58C/U, .195" O.D.
No. 458TE187 24"..$17.64 **No. 458TE802** 48"..$18.86
No. 458TE800 36"..$17.64 **No. 458TE804** 60"..$18.86

BNC Male to Alligator Test Clips
Rating: 150 VAC; Cable type; RG58C/U; .195" O.D.
No. 458TE4531 36" $17.02

BNC Male Minipincer® Test Clips
Rating: 300 VRMS; Cable type: RG58C/U, .195" O.D.
No. 458TE5423 24" $19.33
No. 458TE2336 36" $19.33

BNC Male to Stacking Binding Posts
Converts BNC to double binding posts with banana jacks. Rating: 500 VRMS.
No. 458TE056.....$13.05

BNC Male to Micrograbber® Test Clips
Rating: 150 VRMS/VAC; Cable type; RG174/U, .100" O.D.
No. 458TE2477 24" $27.49
No. 458TE1206 36" $27.49
No. 458TE7487 48" $29.47

BNC Male to Multi-Stacking
Double Banana Plug Cable: RG58C/U; Rating: 500 VRMS max.; .195" O.D.
No. 458TE4530 36" $16.27

BNC Male 50Ω Cable
RG58 C/U Cable with BNC male connectors. Without molded strain relief. .195" O.D.
No. 458TE9724 24" $7.74
No. 458AC5697 36" $7.74
No. 458TE9748 48" $11.17
No. 458TE9760 60" $11.17
No. 458TE9772 72" $11.17

BNC Male 50Ω RG58C/U Cable
RG58 C/U Cable with BNC male connectors. With molded strain relief. .195" O.D.
No. 458TE168 24" $14.27
No. 458TE170 36" $14.27
No. 458TE174 60" $17.94
No. 458TE2249 72" $17.94
No. 458TE491 120" $21.41
No. 458TE918 180" $25.90

Pomona BNC Female

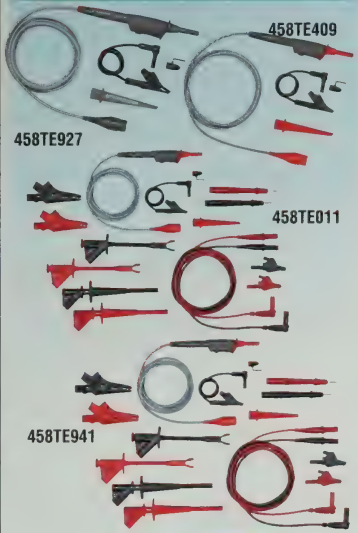
BNC Female to Multi-Stacking Banana Plugs
Rating: 500 WVDC; +55°C (131°F) max.; 7" OAL.
No. 458TE612 .....$9.68

BNC Female Double Stacking Banana Plug
Rating: 500 VRMS; 30 VAC/60 VDC max.
No. 458TE050 .....$7.03

BNC Female to SMD Grabber® Test Clips
Rating: 150 VRMS; +55°C (+131°F) max.; 7" OAL.
No. 458TE305.....$13.76

BNC Female to MiniGrabber® Test Clips
Rating: 300 VRMS; +55°C (+131°F) max.; 7" OAL.
No. 458TE806.....$10.09

Pomona Insulated Probes



Insulated Scope Probes New!
Insulated BNC connectors and probe handles. Meets IEC 61010-031. CAT II, 600V a(CAT III, 300V) rating. Fast 1 ns risetime, 13 pF input and 500 MHz bandwidth with headroom for high frequency measurements. Ergonomic design with comfort grip. Push-on hook clip and reference contact. Reference lead with alligator clip for connection to the 0.2mm safety socket in the handle. (Germany)

X10 insulated, 500 MHz Gray
No. 458TE927.....$186.46
X10 Insulated, 500 Hz, Red
No. 458TE409.....$186.46
Insulated Probe & Lead Kit for Portable Scopes
No. 458TE011.....$340.00
Probe Kit, X10 Insulated, 500 HZ, Red & Gray
No. 458TE941.....$359.04

Pomona BNC Adapters

BNC Within Series Adapters
Connects multiple BNC cables.
No. 458PR896 M-F-F $12.94
No. 458TE266 F-M-F.....$5.70
BNC Female to Phono Plug
No. 458TE5319 .....$6.52
SMA (M) to BNC (F) Adapter Gold plated brass.
No. 458TE4290 .....$8.31
Call for additional sizes.

Precision Electronic Test Probes & Handles

TECHNI-TOOL

Miniature probes are handheld micro-electrodes designed specifically for testing micro circuits and miniature electronic equipment. Each of the screw based, interchangeable miniature probes is ideal for testing under a microscope.

Test Probe Handles
.25" diameter, 3' wire, banana plug.
No. 758TE025 Black $28.90
No. 758TE520 Red $28.90

Sharp Gold Plated Test Probe
.020" diameter needle.
No. 758TE203 30° Bend $35.87
No. 758TE020 Straight $32.30

Sharp Stainless Steel Test Probe
.020" diameter needle
No. 758TE2033 30° Bend $22.10
No. 758TE200 Straight $20.40

Sharp Nickel Plated Tungsten Test Probe
.020" diameter with long tapered point
No. 758TE2333 30° Bend $27.20
No. 758TE220 Straight $25.50

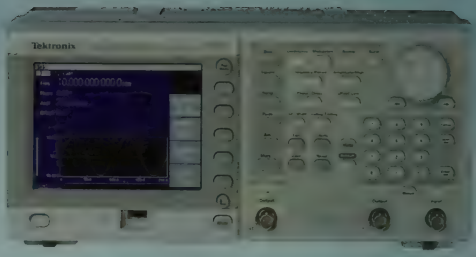
Pomona Test Lead Holders

Holder quickly mounts on any vertical surface to hold and organize test leads for easy selection. Fits wire and cable dia. up to 0.45" (11.4mm). **(USA)**

TT No.	Color	Accepts	Max Dia.	#Slots	PRICE
458TE912	Black	RG 59 & RG 108	.320"	10	$9.13
458TE204	Blue	RG 213 & RG 214	.450'	9	$11.17
458TE080	Orange	RG 58 & RG 142	.210'	14	$11.17

Tektronix

The next generation of Signal Generation!



AFG3000 Series Arbitrary/Function Generators

Affordable generator tests electronic circuits with one or more signal inputs and various waveshapes at frequencies up to 240 MHz. Standard function generator, pulse generator, and arbitrary waveform generator are combined into one small unit that takes up less benchtop space than other generators. Large graphical user interface makes operation easier and faster to learn. ***Three-Year Warranty.***

- New AFG3011 provides signal amplitudes up to 20 Vpp into 50- loads
- Large 5.6" color display makes seeing waveforms & numbers easy
- Intuitive operation
- Up to 240 MHz & 2 GS/s
- 14 bit arbitrary waveforms AM, FM, PM, FSK & PWM modulation
- ArbExpress™ software
- Sine, Square, Pulse, Ramp, Noise, Sin(x)/x, Exponential, Gaussian, Lorentz, Haversine & DC Waveforms
- Pulse waveforms with variable transition times as short as 2.5 ns
- Linear & logarithmic sweep & burst
- Front panel USB connector for waveform storage & transfer via memory stick
- Internal noise generator or add-in signal from external source
- USB, GPIB & LAN for remote control Floating outputs (isolated from ground)

Model	AFG3021B	AFG3022B	AFG3011	AFG3101	AFG3102	AGF3251 Super Series	AFG3252
TT No.	767TE3011	767TE3000	767TE0301	767TE3101	767TE3102	767TE3251	767TE3252
Channels	1	2	1	1	2	1	2
Sine	25 MHz		10 MHz	100 MHz		240 MHz	
Square/Pulse	1 MHz to 12.5 MHz		1 MHz to 50 MHz	1 µHz to 5 MHz		1 MHz to 120 MHz	
Pulse Width	30 ns to 999 s		80 ns to 999 s	8 ns to 999 s		4 ns to 999 s	
Rise/Fall Time	18 ns to 625 s variable		5 ns to 625 s variable	50 ns to 625 s		2.5 ns to 625 s variable	
Arbitrary	125 MS/s		1 GS/s	250 MS/s		2 GS/s	
Waveform Memory	4 x 2 to 64 k		4 x 2 to 128 k	4 x 2 to 128 k		4 x 2 to 128 k	
Amplitude into 50-	10 mVpp to 10 Vpp		20 mVpp to 20 Vpp	20 mVpp to 10 Vpp		200 MHz: 50 mVpp to 5 Vpp >200 MHz: 50 mVpp to 4 Vpp	
Sweep	Lin, Log		Lin, Log	Lin, Log		Lin, Log	
Display	5.6" Mono		5.6" Color	5.6" Color		5.6" Color	
Interface	USB/LAN/GPIB		USB/LAN/GPIB	USB/LAN/GPIB		USB/LAN/GPIB	
USB Cable Included	No	No	Yes	Yes	Yes	Yes	Yes
PRICE	**$1,900.00**	**$2,850.00**	**$3,500.00**	**$3,760.00**	**$4,960.00**	**$6,920.00**	**$9,200.00**

310TE4007

310TE413

310TE4040

310TE4045

Arbitrary Waveform Generator

New!

BK PRECISION

DDS Sweep Function Generators

Low cost, full featured direct digital synthesis (DDS) generator with menu-driven front panel interface and easy-to-read LCD display.

Model	4007DDS	4013DDS	4040DDS	4045
TT No.	310TE4007	310TE413	310TE4040	310TE4045
Frequency Range	0.1 Hz to 7 MHz for sine & square; to 100 KHz for triangle	0.1 Hz to 12 MHz for sine & square; to 1 MHz for triangle	0.1 to 20 MHz sine & square; 0.1 to 2 MHz triangle & ramp	0.1 Hz to 20 MHz sine & square; 0.01 Hz to 2 MHz triangle & ramp
Waveforms	Sine, Square, Triangle, Ramp, Pulse	Sine, Square, Triangle, Ramp, Pulse	Sine, Square, Ramp	Sine, Square, Triangle, Ramp, Pulse, Arbitrary
Amplitude	10V p-p into 500	10V p-p into 50	10V to 10V p-p into 50	10V p-p into 50
Adjustable Duty Cycle	Yes	Yes	Yes	Yes
Adjustable DC Offset	Yes	Yes	Yes	Yes
Offset	±4.5V into 50	±4.5V into 50	±4.5V into 50	±4.5V into 50
PRICE	**$399.00**	**$499.00**	**$699.00**	**$1,036.46**

BK PRECISION

3.5GHz Multifunction Counter

Features: RS232 interface; bright nine digit LED display; period mode for accurate low frequency measurement; totalize mode permits counting of individual events; accurate TCO (Temperature Compensated Oscillator) time base. ***One-Year Warranty.*** (Taiwan)

No. 310TE1856 1856D **$515.00**

Antenna kit
No. 310AC021 ....**$40.52**

New!

BK PRECISION

Programmable DDS Function Generators

High performance synthesized generators with a wide frequency range up to 120 MHz. 27 standard and complex waveforms and 8 arbitrary waveforms are built-in. **Includes:** BNC to alligator cable, BNC to BNC cable, RS232 communications cable, power line cord, test report, spare fuse.

No. 310TE4084 20 MHz **$925.00**
No. 310TE4085 40 MHz.....**$1,150.00**
No. 310TE4086 80 MHz.....**$1,375.00**
No. 310TE4087 120 MHz.....**$1,650.00**

TECHNI-TOOL Tomorrow's Products Shipped Today
Phone: 1-800-832-4866 or 1-610-941-2400

Agilent Technologies
Authorized Distributor

Clean, stable waveforms at an affordable price

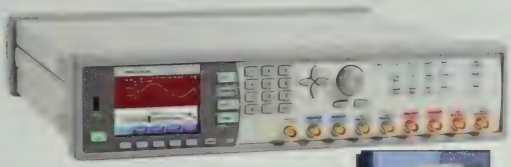
Function/Arbitary Waveform Generators

Agilent offers a complete range of models each best in class for price and performance. The 33210A is a cost-effective solution for low-distortion, high accuracy signals. The 33220A is a low cost, full featured generator that provides arbitrary waveforms at no extra cost. And you'll find the 33250A a very competitively priced 80 MHz unit with a 200 MSa/s sample rate.

Model No.	33210A	33220A	33250A
TT No.	431TE3210	431TE3322	431TE3325
Frequency range (sine, square)	10 MHz	20 MHz	80 MHz
Standard waveforms	Sine, square, ramp, triangle, pulse, noise, DC	Sine, square, pulse, triangle, ramp, noise, sin(x)/x, exponential rise and fall, cardiac, DC volts	
Arbitrary waveforms	Optional 2 to 8K points	2 to 64 K points	
Sample rate	50 MSa/s		200 MSa/s
Modulation (all internal/external)	AM, FM, PWM, sweep and burst	AM, FM, PM, FSK, PWM, sweep and burst	AM, FM, FSK, sweep and burst
Sweep	Linear or logarithmic; up or down		
Burst	Gated, N-cycle		
External clock reference External lock range: Internal frequency:	Optional 10 MHz ± 500 Hz 10 MHz		Standard 10 MHz ± 35 kHz 10 MHz
Connectivity	GPIB, USB, LAN LXI class C compliant		GPIB/RS-232
Software	Intuilink Waveform Editor		
PRICE	$1,195.00	$1,860.00	$4,571.00

Agilent Technologies
Authorized Distributor

New!



Optimum signal fidelity in a versatile, integrated instrument

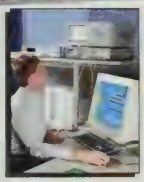
81150A Pulse Function Arbitrary Noise Generator

Test your product under realistic conditions with this new class of instrument that integrates accurate pulse, function/arbitrary waveform and noise generation into one box to minimize cabling, space, test time and increase signal performance.

- Integrated 120-MHz pulse and function generator (240-MHz sine), 2 GSa/s, 14-bit arbitrary waveform generator and noise generator with 26 days repetition time
- Clean precise signals: intrinsic jitter <8 ps at any frequency
- FM, AM, PM, PWM, FSK modulation up to 10 MHz
- Waveform editor to download captured oscilloscope traces
- Built-in GPIB, USB and LAN
- Extensive modulation features, flexible noise functions and selectable crest factor to help you craft realistic test signals

One Channel
No. 431TE1151 .....**$9,004.00**

Two Channel
No. 431TE1152 .....**$13,248.00**



Agilent Technologies
Authorized Distributor

Fast, precise measurements and a host of High-end features at an affordable price

53131A Universal Frequency Counter

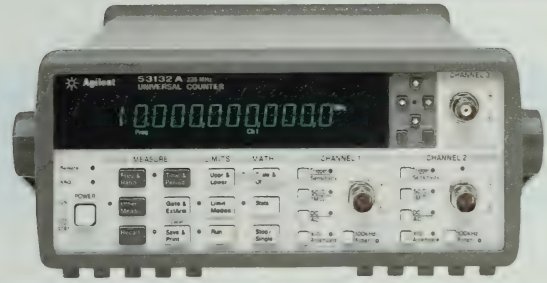
- Make accurate measurements quickly and easily with the intuitive interface and one-button access to frequently used functions
- Real-time digital signal processing for higher resolution measurements in a fraction of the time it takes other counters
- Automated limit tests and one-button setups

53132A Universal Frequency Counter

- For applications that need higher resolutions than you get with the 53131A
- Up to 12-digits/sec frequency resolution and 150-ps time interval resolution
- Advanced arming mode for time interval measurements

53181A RF Frequency Counter

- Optimized for RF applications
- Digit-blanking functions let you easily eliminate unnecessary digits when you want to reach measurement quickly



Model No.	53131A	53132A	53181A
TT No.	431TE131	431TE5313	431TE181
Measurements	Frequency, frequency ratio, time interval, period, rise fall time, positive/negative pulse width, duty cycle, phase, totalize, peak voltage,time interval average, time interval delay		Frequency, frequency ratio (with optional Channel 2), period, peak voltage
Analysis	Automatic limit testing, math (scale and offset), statics (min, max, mean, standard deviation)		
Frequency Range	DC to 225 MHZ	DC to 225 MHZ	DC to 225 MHZ
Resolution	10 digits/s, 500 ps	12 digits/s, 150 ps	10 digits/s, RF
Connectivity	Standard IntuiLink software, GPIB and RS-232 (print only)		
Price	$2,164.00	$3,357.00	$1,885.00

Agilent Technologies

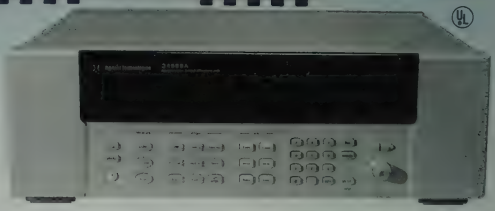
Authorized Distributor

34970A

Dedicated data acquisition performance at PC plug-in prices!

New!

34980A



Data Acquisition/Switch Systems

Data Acquisition Control Units are a compact, economical, one-box solution for data logging, data acquisition, and general-purpose switching and control applications. These units can operate as a stand alone data logger with 50,000 readings of built-in memory. Includes Agilent BenchLink data logger software, which provides easy test configuration setup and real-time data display and analysis.

Features

- 3-slot mainframe with built-in GPIB and RS232 (34970A) and GPIB, USB, and Ethernet (34980A) interfaces
- 34970A offers 8 different plug-in modules including low-frequency and RF-multiplexers, matrix and actuation switches, digital input and output, analog output, and event recording
- 34980A offers 19 different plug-in modules including switching from DC to 20 GHz, digital I/O, D/A converters, and counter/totalizer functionality. Up to 560 2-wire Multiplexer channels or 1024 2-wire Matrix cross points in a single Mainframe
- 6-1/2 digit (22-bit) internal DMM, scanning up to 250 channels per second
- Built-in signal conditioning measures thermocouples, RTDs and thermistors, ac/dc volts and current; resistance; frequency and period
- 50k readings of non-volatile memory holds data when power is removed
- Hi/LO alarm limits on each channel, plus 4 TTL alarm outputs
- BenchLink Data Logger Pro software (optional) provides advanced datalogging and decision making capabilities without spending hours programming

34970A Mainframe
No. 431TE970 .....$1,558.00

BenchLink Data Logger Pro Software for 34970A
No. 431TE4830 .....$795.00

34980A Mainframe
No. 431TE4980.....$2,443.00

BenchLine Data Logger Pro Software for 34980A
No. 431TE4832 .....$995.00

34970A Control Modules *(Mainframe Required)*

TT No.	Model	Description	Speed (ch/sec)	Max Voltage	Max Current	Comments	PRICE
431TE901	34901A	20-ch. multiplexer (2/4-wire)	60	300V	1A	2 current channels (22 ch total); built-in cold junction reference; connects to internal DMM	$480.00
431TE902	34902A	16-ch. multiplexer (2/4-wire)	250	300V	50mA	Built-in cold junction reference; reed relays multiplex inputs to internal DMM	$566.00
431TE903	34903A	20-ch. actuator/GP switch	120	300V	1A	Form C (SPDT) switches; no connection to internal DMM	$414.00
431TE904	34904A	4x8 Matrix	120	300V	1A	2-wire, full crosspoint; no connection to internal DMM	$480.00
431TE905	34905A	2-GHz dual 1:4 RF mux, 50Ω	60	42V	0.7A	1-GHz through provided BNC-to-SMB adapter cables; no connection to internal DMM	$756.00
431TE907	34907A	Two 8-bit digital IO ports 26-bit, 100kHZ event counter Two 16-bit analog outputs	N/A	42V 42V ±12V	400mA 10mA	Open drain Gated, selectable input threshold; Earth referenced; calibrated; No connection to internal DMM	$359.00
431TE908	34908A	40-ch. single-ended multiplexer	60	300V	1A	Common low, no 4-wire meas. Built-in cold junction reference; connects to internal DMM	$480.00

34980A Control Modules *(Mainframe Required)* New!

TT No.	Model	Description	Module Connectors	PRICE
Multiplexer Modules				
431TE4921	34921A	40-channel armature multiplexer w/low thermal offset	2 - 50 pin Dsub, Male	$809.00
431TE4922	34922A	70-channel armature multiplexer	2 - 78 pin Dsub, Male	$1,306.00
431TE4923	34923A	40/80-channel reed multiplexer	2 - 50 pin Dsub, Male	$1,012.00
431TE4924	34924A	70-channel reed multiplexer	2 - 78 pin Dsub, Male	$1,508.00
431TE4925	34925A	40/80-channel optically isolated FET multiplexer	2 - 50 pin Dsub, Male	$1,206.00
Matrix Modules				
431TE4931	34931A	Dual 4x8 armature matrix	2 - 50 pin Dsub, Male	$910.00
431TE4932	34932A	Dual 4x16 armature matrix	2 - 50 pin Dsub, Male	$1,508.00
431TE4933	34933A	Dual/quad 4x8 reed matrix	2 - 50 pin Dsub, Male	$1,013.00
General Purpose/Actuator Modules				
431TE4937	34937A	32-channel Form C/Form A general purpose switch	2 - 50 pin Dsub, Male	$910.00
431TE4938	34938A	20-channel 5-amp Form A switch	2 - 50 pin Dsub, Male	$1,104.00
RF and Microwave Modules				
431TE4941	34941A	Quad 1x4 50-ohm 3 GHz RF multiplexer	10 - SMA	$1,608.00
431TE4942	34942A	Quad 1x4 75-ohm 1.5 GHz RF multiplexer	10 - Mini SMB	$1,608.00
431TE4945	34945A	Microwave switch/attenuator driver	N/A	$1,200.00
System Measurement & Control Modules				
431TE4950	34950A	64-bit digital I/O with memory and counter	2 - 78 pin Dsub, Female	$1,206.00
431TE4951	34951A	4-channel isolated D/A converter with waveform memory (DMM option required for calibration)	1 - 50 pin Dsub, Female	$1,013.00
431TE4952	34952A	Multifunction module with 32-bit DIO, 2-channel D/A and totalizer	1 - 50 pin Dsub, Female	$707.00
431TE4959	34959A	Breadboard module	26 and 40 pin internal ribbon cable connectors	$503.00

HUNTRON

New!

Model 30 Compact Tracker

Compact Tracker works with Huntron Workstation, Scanner II, Scanner 31S or the Huntron Access Prober. Take advantage of Tracker signature analysis capabilities to troubleshoot PCB faults to the component level without applying power, saving circuits from possible further damage.

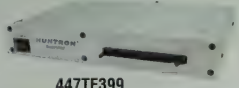
Set the applied voltage, frequency and source resistance to best match the circuit characteristics and display the optimum Tracker signature. The power of Huntron Workstation allows for the creation of Tracker Model 30 test routines and signature storage. ***One-Year Limited Warranty.***

Adding a Huntron® Scanner to your Tracker Model 30 system lets you access components using standard DIP clips and cables, custom cables to PCB connectors or interface to a bed-of-nails.
No. 447TE030 .....**$4,995.00**

Diagnose and isolate faulty components!

447TE030

- **Scanner 31S** - single channel, 64 pin accessory
  No. 447TE399.....**$2,445.00**
- **Scanner II** - dual channel, 64 pins per channel accessory
  No. 447TE393.....**$2,750.00**
- **Scanner Adapter** lets you connect IDC style cables to Scanner II
  No. 447TE491 .....**$575.00**
- **Through-hole (standard) DIP Clip Kit**- two each: 8, 16,18, 20, 24, 28 and 40 pin clips. Two each of the 20 pin and 40 pin DIP clip cables are included. Compatible with ProTrack Scanner, Scanner II (with scanner adapter) and Scanner 31S
  No. 447TE490 .....**$370.00**
- **SMT SOIC Clip Set** - 0.15" and 0.3" (wide) versions of 8, 14, 16, 18, 20, 24 and 28 pin clips. Includes cable compatible with the ProTrack Scanner, Scanner II (with scanner adapter) and Scanner 31S.
  No. 447TE392 .....**$920.00**



447TE399

447TE393

447TE491

447TE490

447TE392

HUNTRON

New!

Tracker® 2800 and 2800S

Power off testing to troubleshoot low voltage logic circuitry. Low voltage range makes these units ideal for testing passive devices like as high value capacitors while still in-circuit. Source voltage, source resistance and test frequency are clearly defined on front panel. A variable 5VDC voltage generator allows you to switch gate-fired devices so they can be tested on and off. SigAssisT displays real-time numeric information such as breakdown voltage, resistance, capacitance and power to help with signature interpretation.

No. 447TE2800 2800 .....**$2,995.00**
No. 447TE2801 2800S **$3,995.00**

2800

2800S

Specifications:

Waveform: Sine Wave
Test Frequencies: 20 Hz, 50 Hz, 60 Hz, 200 Hz, 500 Hz, 2000 Hz
Open Circuit Voltage: 200 mV, 3V, 5V, 10V, 15V, 20V
Source Resistance: 10Ω, 50Ω, 100Ω, 500Ω, 1kΩ, 5kΩ, 10kΩ, 50kΩ, 100kΩ

Functions
Range Selection: Manual or automatic
Channels: 2
Scan 40 Pins per Channel (2800S only): 40

DC Source
Level: 0 to 5VDC
Output Impedance: 25Ω
Short Circuit Current: 200mA
Line voltage: 110VAC/115VAC, 230VAC
Frequency: 50/60Hz, 50 Hz
Power: 200mA
LCD Display: Color TFT LCD with Touch Screen; LED backlight
Display Modes: A, B, Alt

Scan 40 Pins per Channel!

Agilent Power Supplies

Agilent Technologies
Authorized Distributor

New!

Reliable power, repeatable results

U8000 Manual DC Power Supplies

More protection and convenience at an incredible price.

- Excellent load and line regulation -CV: <.01% +2mV; CC: <.02% +2mA
- Low output noise: 1 mVrms
- Over voltage and over current protection

Model	U8001A	U8002A
TT. No.	431TE8001	431TE8002
GPIB	N	N
Output	1	1
Range	1	1
Voltage	30 V	30 V
Current	3 A	5 A
Power	90 W	150 W
PRICE	$295.00	$370.00

431TE8001 (U8001A)

431TE8002 (U8002A)

Agilent Technologies
Authorized Distributor

E3600A DC Power Supplies

Quiet, stable, reliable DC power. For everyone who needs to watch test costs as closely as they watch test results.

- Extremely low output noise – as low as 1 mVp-p/0.2mVrms
- Tight .01% load and line regulation for steady output power levels
- Fast load transient response time
- 30 to 200 W output power
- Convenient front-panel programming and/or GPIB and RS-232

E3610A-17A/20A/30A Manual DC Power Supplies

- Up to 120 V and 6 A – just the power you need
- 30 to 60 W – single, double, triple outputs
- 10-turn pots – make fine adjustments easily

Model	E3610A	E3611A	E3612A	E3614A	E3615A	E3616A	E3617A	E3620A	E3630A
TT. No.	431TE361	431TE611	431TE612	431TE614	431TE613	431TE618	431TE017	431TE620	431TE630
GPIB	N	N	N	N	N	N	N	N	N
Output	1	1	1	1	1	1	1	2	3
Range	2	2	2	1	1	1	1	1	1
Voltage	8 V/ 15 V	20 V/35 V	60 V/120 V	8 V	20 V	35 V	60 V	25 V	6V/20 V/-20V
Current	3 A/2 A	1.5 A/.85 A	.5 A/.25 A	6 A	3 A	1.7 A	1 A	1 A	2.5A/.5 A/.5 A
Power	30 W	30 W	30 W	48 W	60 W	60 W	60 W	50 W	35 W
PRICE	$441.00	$441.00	$441.00	$692.00	$692.00	$692.00	$692.00	$602.00	$602.00

Agilent Technologies
Authorized Distributor

E3631A-34A Programmable DC Power Supplies

- Affordable system-level performance
- 80 to 200 W – single or triple output for more power options
- Rotary knob and self-guiding keypads – precise adjustments for output resolution

Model	E3631A	E3632A	E3633A	E3634A
TT. No.	431TE631	431TE632	431TE633	431TE634
GPIB	Y	Y	Y	Y
Output	3	1	1	1
Range	1	2	2	2
Voltage	25 V/-25 V/6 V	15 V/30 V	8 V/20 V	25 V/50 V
Current	1 A/1 A/5 A	7 A/4 A	20 A/10 A	7 A/4 A
Power	80 W	120 W	200 W	200 W
PRICE	$1,266.00	$1,107.00	$1,338.00	$1,338.00

Agilent Technologies
Authorized Distributor

E3640A-49A Programmable DC Power Supplies

- Remote sensing – eliminate voltage regulation errors caused by drop in load leads
- Front/rear output terminals
- Internal non-volatile memory – store and recall setups fast

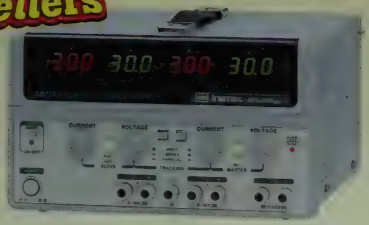
Model	E3640A	E3641A	E3642A	E3643A	E3644A	E3645A	E3646A	E3647A	E3648A	E3649A
TT. No.	431TE364	431TE365	431TE366	431TE367	431TE368	431TE369	431TE370	431TE371	431TE372	431TE373
GPIB	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Output	1	1	1	1	1	1	2	2	2	2
Range	2	2	2	2	2	2	2	2	2	2
Voltage	8 V/20 V	35 V/60 V	8 V 20 V	35 V/60 V	8 V/20 V	35 V/60 V	8 V/20 V	35 V/60 V	8 V/20 V	35 V/60 V
Current	3 A/1.5 A	.8 A/.5 A	5 A/2.5 A	1.4 A/.8 A	8 A/4 A	2.2 A/1.3A	3 A/1.5 A	.8 A/.5 A	5 A/2.5 A	1.4 A/.8 A
Power	30 W	30 W	50 W	50 W	80 W	80 W	60 W	60 W	100 W	100 W
PRICE	$723.00	$723.00	$771.00	$771.00	$942.00	$942.00	$1,011.00	$1,011.00	$1,209.00	$1,209.00

TECHNI-TOOL Tomorrow's Products Shipped Today
Phone: 1-800-832-4866
or 1-610-941-2400

471TE3030

Best Sellers

471TE3303



New! Programmable

471TE3202

GW INSTEK DC Power Supplies

- GPS: Multi-Output
- GPC, PST: Triple Output
- Constant voltage & current operation
- Light & compact design
- Series or Parallel function
- Remote control by external voltage
- PST-100 sets memory
- Overload & reverse polarity protection
- *Two-Year Warranty*

JUST THE FACTS

Model	GPS-3030DD	GPS-2303	GPS-3303	GPS-4303	GPC-1850D	GPC-3030D	GPR-351HD	PST-3202
TT No	**471TE3030**	**471TE2303**	**471TE3303**	**471TE4303**	**471SO185**	**471TE030**	**471TE3510**	**471TE3202**
Type	Digital	Digital	Digital	Digital	Digital	Digital	Digital	Digital
Output	Single	Dual	Triple	Quad	Triple	Triple	Single	Triple
3-digit Display	2	4	4	4	2	2	2	1
Voltage	30V	30V	30V	30V	18V	30V	35V	32V
Amps	3A	3A	3A	3A	5A	3A	10A	2A
Series	X	X	X	X	36V; 5A	60V; 3A	–	X
Parallel	X	X	X	X	18V; 10A	30V; 6A	–	X
Low Ripple & Noise	X	X	X	X	X	X	X	X
PRICE	**$235.00**	**$370.00**	**$420.00**	**$450.00**	**$460.00**	**$460.00**	**$705.00**	**$970.00**
With GPIB PRICE	–	–	–	–	–	–	–	471TE3200 **$1,075.00**

355TE3822

355TE213

355TE2202

355TE270

New!

355TE8226

355TE280

EXTECH INSTRUMENTS A FLIR COMPANY DC Power Supplies

For applications ranging from circuit board power in R & D labs to production test systems and much more, DC power supplies are packed with the features you need. ***One-Year Warranty.***

- Voltage and current levels required for an application
- Analog or digital display for current and voltage
- Programmable outputs
- Ability to operate remotely via computer interface

Model	382200	382202	382213	382260	382270	382280
TT No.	**355TE3822**	**355TE2202**	**355TE213**	**355TE8226**	**355TE270**	**355TE280**
Type	Adjustable; Dual LCD	Adjustable; Dual LCD	Adjustable; Digital LCD	Switching, Dual Digital LED	4-in-1 Quad Output	Programmable; Digital LCD
PC interface	N	N	N	N	N	Y
Output	1	1	3	3	4	1
Voltage	30 V	18 V	30 V/12 V/5 V	16V/ 27 V/36 V	30 V/30 V/6.5 V/15 V	40 V
Current	1 A	3 A	3 A/0.5 A/0.5 A	5A/ 3A/ 2.2A	5 A/5 A/3 A/1 A	5 A
Power	110V/60Hz	110V/60Hz	110/220 V/50-60Hz	90-234V/47-63Hz	110/240 V/50-60Hz	110/220 V/50-60Hz
PRICE	**$129.99**	**$139.99**	**$199.99**	**$259.99**	**$449.99**	**$599.00**

LASCAR ELECTRONICS LIMITED

Benchtop Power Supply

- 1.5 to 30V DC Output
- 0 to 1A Output Current
- 100 to 240V AC Input

This compact and lightweight benchtop power supply is designed as an affordable and functional piece of lab equipment. The output voltage can be set to within 0.1V. Large backlit LCD displays the output voltage and the current being drawn. Has over-voltage/current and short circuit protection. (China)

No. 260TE130 .....**$89.95**

1686A, 1688A

1690

1790, 1791

1696, 1697, 1698

1653A

1692

1666/1667

1710A, 1711A, 1730A

1715A, 1735A

1740B, 1743B, 1744A

1745B

BK PRECISION Power Supplies

PICK THE POWER SUPPLY TO FIT YOUR NEED...

A Power Supply is an instrument that provides either Alternating (AC) or Direct (DC) Voltage/Current to an electronic circuit. The programmable Power Supply allows direct key-in entry to make Voltage/Current selection faster and more accurate.

High Current DC Power Supplies

JUST THE FACTS					
Model	**1686A**	**1688A**	**1690**	**1790**	**1791**
TT No.	**310ME1686**	**310ME1688**	**310TE1690**	**310TE1790**	**310TE1791**
Type	Variable	Variable	Regulated	Regulated	Regulated
Output	High Current	High Current	High Current	High Current	High Current
Output Voltage DC	3-14V	3-14V	1-15V	0-32V	0-64V
Output Current	0-12A @ 13.8V	0-20A @ 13.8V	0-28A @ 13.8V	20A Peak	10A Peak
Metering	2 Analog	2 Analog	2 Digital	2 Digital	2 Digital
Overload Protection	Current, Limiting, Reverse Polarity, Overvoltage, Short Circuit				
Warranty	One-Year	One-Year	One-Year	Two-Year	Two-Year
PRICE	**$205.00**	**$309.00**	**$359.00**	**$1,395.00**	**$1,395.00**

Programmable DC Power Supplies

JUST THE FACTS			
Model	**1696**	**1697**	**1698**
TT No.	**310TE1696**	**310TE1697**	**310TE1698**
Output	Single (Switching)	Single (Switching)	Single (Switching)
Output Voltage DC	1-20V	1-40V	1-60V
Output Current	10A	5A	3.3A
Display Meter	4 Digit LCD	4 Digit LCD	4 Digit LCD
Overload Protection	Current, Limiting, Reverse Polarity, Overvoltage, Short Circuit		
Warranty	One-Year	One-Year	One-Year
PRICE	**$339.00**	**$319.00**	**$339.00**

Switching DC Power Supplies

JUST THE FACTS				
Model	**1653A**	**1666**	**1667**	**1692**
TT No.	**310TE1653**	**310TE1666**	**310TE1667**	**310TE1692**
Output	Variable Isolated	Single (Switching)	Single (Switching)	Single (Switching)
Output Voltage	0-150V AC	1-40V DC	1-60V DC	3-15V
Output Current	0-2A	0-5A	0-3.3A	40A
Metering	1 Analog	2 Digital	2 Digital	2 Digital
Overload Protection	Current, Limiting, Reverse Polarity, Overvoltage, Short Circuit			
Warranty	One-Year	One-Year	One-Year	One-Year
PRICE	**$329.00**	**$245.00**	**$245.00**	**$309.00**

Single DC Power Supplies

JUST THE FACTS					
Model	**1710A**	**1711A**	**1715A**	**1730A**	**1735A**
TT No.	**310ME610**	**310TE1611**	**310TE1715**	**310ME1630**	**310TE1635**
Output	Single	Single	3 Digit LED	Single	Single
Output Voltage DC	0-30V	0-60V	0-60V	0-30V	0-30V
Output Current	0-1A	0-2A	0-2A	0-3A	0-3A
Metering	2 Analog	2 Analog	2 Digital	2 Analog	2 Digital
Overload Protection	Current, Limiting, Reverse Polarity, Overvoltage, Short Circuit				
Warranty	Two-Year	Two-Year	Two-Year	Two-Year	Two-Year
PRICE	**$249.00**	**$329.00**	**$409.00**	**$329.00**	**$409.00**

JUST THE FACTS				
Model	**1740B**	**1743B**	**1744A**	**1745B**
TT No.	**310AC740**	**310TE1743**	**310TE1744**	**310TE1745**
Output	Single	Single	Single	Single
Output Voltage DC	0-60V	0-35V	0-35V	0-35V
Output Current	0-4A	0-6A	0-10A	0-10A
Metering	Analog	3 digit LED	Analog	2 Digital
Overload Protection	Current, Limiting, Reverse Polarity, Overvoltage, Short Circuit			
Power Consumption	450W	420W	560W or less	560W
Additional Features:	Voltmeter Range: 0-64V; current limiting, reverse polarity overvoltage and short circuit overload protection	Voltmeter Range: 0-99.9V; current limiting, reverse polarity overvoltage and short circuit overload protection	Turn off power to output terminals without powering down power supply	Turn off power to output terminals without powering down power supply
Warranty	Two-Year	Two-Year	Two-Year	Two-Year
PRICE	**$539.00**	**$539.00**	**$665.00**	**$719.00**

Check Out Our New Lower Prices!

PICK THE POWER SUPPLY TO FIT YOUR NEED...

Triple DC Power Supplies

Best Seller

JUST THE FACTS					
Model	New! 9130	1672	1670A	1760A	1761
TT No.	310TE9130	310TE1672	310TE1670	310TE1660	310TE1761
Output	Triple	Triple	Triple	Triple	Triple
Output Voltage DC	(A & B) 030V, (C) 0-5V	(A & B) 0-32V, (C) fixed 5V	(A) 0-30V, (B)12V, (C) 5V	(A&B) 0-30V, (C) 5V	(A&B) 0-35V, (C) 2-6.5V
Output Current	(A & B) 0-3A, (C) 0-3A	(A & B) 0-3A, (C) 0-3A	(A) 3A, (B&C) 0-500mA	(A&B) 0-2A, (C) 0-5A	(A&B) 0-3A, (C) 0-5A
Display	Triple	Quad	Dual	Dual	Dual
Metering	3 Digital	2 Digital	2 Digital	2 Digital	2 Digital
Overload Protection	Over Voltage, Over-Temperature	Current, Limiting, Reverse Polarity, Overvoltage, Short Circuit			
Warranty	One-Year	One-Year	One-Year	Two-Year	Two-Year
PRICE	$895.00	$469.00	$195.00	$659.00	$699.00

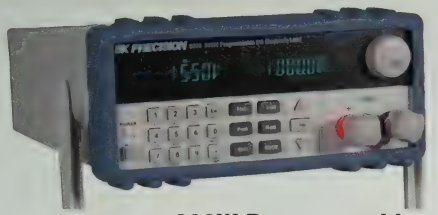
BK PRECISION®

Same Power, Less Cost Than Linear Supplies!

High Power Switching DC Power Supplies

The New VSP power supplies utilize modern switch mode technology to produce high-power, low-noise switching supplies, that cost about 25% less than linear supplies with the same power. Each unit produces 1.2 kw at 20V, 40V, 60V, and 120V output voltages in a 19" rack mounted chassis. Each unit measure just 1U (1-3/4") in height, so nine units can be cascaded to produce more than 10 kw of DC power. Front to back air flow allows full power operation without space between supplies. Control output voltage by turning manually or through remote control from an RS-232 interface or GPIB. Analog remote sensing automatically maintains desired voltage at load levels of power cable. A built-in RFI-filter reduces conducted power line noise emissions, as well as susceptibility, allowing the supplies to meet EN55022 Class A standards. ***One-Year Warranty.*** (India)

JUST THE FACTS			
TT No.	310TE6021	310TE2051	310TE403
Output	Single (switching)	Single (switching)	Single (switching)
Output Voltage DC	60	20	40
Output Current	20A	50A	30A
Metering	2 digital (3 digit)	2 digital (3 digit)	2 digital (3 digit)
Additional Features	Low noise; Compact 1U (1.75") ht; 9 units can be cascaded;	Low noise; Compact 1U (1.75") ht; 9 units can be cascaded;	Low noise; Compact 1U (1.75") ht; 9 units can be cascaded;
	Manual tuning	Manual tuning	Manual tuning
	GPIB Interface	GPIB Interface	RS-232 Interface
PRICE	$1,995.00	$1,995.00	$1,775.00



BK PRECISION®

300W Programmable DC Electronic Load

Affordable and full-featured with a high degree of accuracy and great display resolution. Ideal for DC power supply and DC-DC converter testing and calibration. Fully programmable via the RS-232 or optional USB interface, making it a great companion for automated test systems. **Features:** High resolution 0.1 mA/1mV (range dependent); VFD display; CV/CC/CW/CR operation; Over-current/over-voltage/over-power/ over-temperature protected; Thermostat controlled internal fan; Connect multiple unit in either parallel or series to increase power rating. **Includes:** RS-232 interface cable and software.

One-Year Warranty.

No. 310TE8500 .....$1,067.71

	Voltage	Current	Power
Input Rating:	0 to 120 VDC	1mA to 30A	300W
	Range	Accuracy	Resolution
Load Regulation:	0-18V	±(0.05%+0.02%FS)	1mV
	0-120V/500V	±(0.05%+0.025%FS)	10mV
	0-3A	±(0.1%+0.1%FS)	0.1mA
	0-30A/15A	±(0.2%+0.15%FS)	1mA
CV Mode Regulation	1.5-18V	±(0.05%+0.02%FS)	1mV
	1.5-120V/500V	±(0.05%+0.025%FS)	1mA
CC Mode Regulation	0-3A	±(0.1%+0.1%FS)	0.1mA
	0-30A/15A	±(0.2%+0.15%FS)	1mA
CR Mode Regulation	0.1-10Ω	±(1%+0.3%FS)	0.001Ω
	10-99Ω	±(1%+0.3%FS)	0.01Ω
	100-999Ω	±(1%+0.3%FS)	0.1Ω
	1K-4KΩ	±(1%+0.8%FS)	1Ω
CW Mode Regulation	0-100W	±(1%+0.1%FS)	1mW
	100-300W	±(1%+0.1%FS)	10mW

BK PRECISION® New!

Deluxe 10:1 Probes

6/150MHz bandwidth; X1, X10 & REF switchable attenuation; 48" cable length; Includes full accessory kit with a spring hook, replacement tip and BNC adapter. IEC6100-2-031.

No. 310TE015 Red $56.48

No. 310TE037 Grey $56.48

Power Supply Test Leads Set

Combines safety and functionality. Highly flexible silicone jacketed test leads feature retractile sheath banana plug to connect to the power supply and a fixed sheath banana plug to protect the user. **Includes:** Large alligator clips, standard alligator clips; spade lug and banana plug adapters, plus one assembled set.

No. 310TE006.....$47.81

Test Sets

Hook-up cable set with 4mm banana plug to alligator clip. 5A rating. Black and red pair. 40" length.

No. 310AC005 .....$11.05

Agilent Technologies

Authorized Distributor

A New Standard for Impedance Measurements

Precision LCR Meter

Agilent E4980A Precision LCR Meter offers the highest accuracy and repeatability from 20 Hz to 2 MHz, and supports LAN, USB and GPIB PC connectivity. Unlike competing LCRs, the E4980A offers fast measurement speed and outstanding performance at both low and high impedance. Compared with Agilent's 4284A LCR, the E4980A provides measurements 5 times faster, a modern PC interface, compact size and additional features to further enhance your design and test productivity.

Features:

- Accurate Measurement
- Exceptionally low noise at both low and high impedance to improve test quality
- 0.05% basic impedance accuracy
- Open/Short/Load compensation support
- Cable extension (1/2/4m) support
- Fast Measurement Speed
- 5.6ms (short), 88ms (med), 220ms (long)
- Measurement Versatility
- 4 digit resolution at any frequency
- 100 mV to 2 Vrms, 1 uA to 20 mA variable test signal
- 201 points programmable list sweep
- Power and DC Bias Enhancement
- 0 to 20 Vrms/100 mArms test signal
- Built-in 40 Vdc bias with 0.3 mV resolution and 10 Vdc source
- DC resistance, DC current, and DC voltage measurement capability

Model	E4980A	4263B
TT No.	431TE4981	431TE4263
Description	Precision LCR Meter	LCR Meter
Measurement Range (full Scale)	1 mΩ to 100 mΩ	1 mΩ to 100 mΩ
Test Frequencies	20 Hz-2 MHz (0.01Hz min, 45001 pts)	100/200/1k/10k/100kHZ (20kHz Opt)
Test Signal Level	V: 0 to 2V (20V: Opt 001)	20mV to 1V
ALC	Yes	No
DC Bias	+1.5V, +2V/+140V (Opt 001/40A max with 4281A)	+1.5V, +2V
Display Resolution	7 digits	5 digits
Averaging Factor	1 to 256	1 to 256
Basic Accuracy	C: 0.05%, D: 0.0005 (relative accuracy)	C: 0.1%, D: 0.001
Measurement Time	5.6m/89m/220ms	2.5ms/65ms/500ms
Contact Check	No	Yes
Comparator	9 bins+AUX+OUT OF BIN	Hi/In/Lo
Cable Extension	1m, 2m, 4m	1m, 2m (<+10kHz(20kHz)), 4m(<+1kHZ)
GPIB	Yes	Yes
Save/Recall	10 sets of setup data on each internal/USB memory	10 setup data on internal EEPROM
PRICE	$15,189.00	$3,978.00

BK PRECISION

For both component evaluation and fundamental impedance

885/886 Synthesized In-Circuit LCR/ESR Meter

The first handheld meter of this type, with a wide range of test frequencies up to 10 kHz and many measurement parameters including Z, L, C, DCR, ESR, D, Q, and O. Has a built-in direct test fixture to easily test lead components. **Features:** Dual LCD display; SMD surface mount tweezer probe; Fully auto/manual selection; DC resistance measurement; Infrared RS-232 interface capability. **Specs:** Frequency: 100 Hz - 10 kHz; Level: 1Vrms - 1Vdc; Output Impedance: 100Ω, ±5%. **Includes:** SMD Probe, rechargeable battery and AC cord. ***Two-Year Warranty.*** (Taiwan)

No. 310TE885 .....**$565.00**

No. 310TE886 (100 kHz Only) **$785.00**

875B Low-Ohm LCR Meter

Measure inductors, resistors and capacitors quickly and accurately. Utilizes special circuitry to more closely replicate true in-circuit measurements. Zero adjust removes leads resistance. **Specs:** Capacitance range: 200pF - 20mF; Resistance range: 2Ω - 20MΩ; Inductance range: 200μH – 200H. **Includes:** Test lead; Spare fuse; AC power adapter. Requires: 9V battery. ***Three-Year Warranty.*** (Taiwan)

No. 310TE875 .....**$195.00**

878A/879 LCR Meter with Statistical Functions

Measures components in either series and parallel mode, and simultaneously displays measured value and Q or dissipation factor. Prompts you when calibration is needed, and shows whether to calibrate with an open or short. **Features:** Min/Max average; Relative mode; Tolerance mode; Selectable test frequencies, Model 878: 120Hz, 1 kHz; Model 879: 100 Hz, 120 Hz, 1 kHz, 10 kHz. **Specs:** Capacitance range: 1,000pF - 10mF; Resistance range: 10Ω - 10MΩ; Inductance range: 1mH – 10,000H. Model 879 also has backlit display. **Includes:** Test lead; Spare fuse; AC power adapter. Requires a 9V battery. ***One-Year Warranty.*** **(USA)**

No. 310ME878 .....**$249.00**

No. 310TE879.....**$299.00**

Model 890B Capacitance Meter

Large 4-1/2 LCD with dual display simultaneously shows values and deviations from selected tolerances. Sorts on preset tolerances of 1, 5 or 10%. Built-in chip and microprocessor allows you to program unique values to sort specific circuit applications. 11,000 counts resolution and 9 automatically selected ranges with full scale values from 1.0 pF to 5.0 mF. Static recording of max/avg/min values. Uses 9V battery.

No. 310TE8900 .....**$134.00**

GW INSTEK High Precision LCR Meter

Test continuously variable frequencies from 12 Hz to 200 kHz; 100 sets memory for save/recall of setup; R/Q, C/D, C/R, L/Q, Z/0, L/R Test Modes; Absolute value, delta value and delta % measurement display; 240 x 128 dot matrix LCD display; Simultaneous display of test condition and test result; Backlit display. ***Two-Year Warranty.***

100 Hz to 2 kHz
No. 471TE816.....**$900.00**

12 Hz to 10 kHz
No. 471TE817 .....**$1,530.00**

12 Hz to 100 kHz
No. 471TE819 .....**$1,850.00**

12 Hz to 200 kHz; w/ RS-232 Interface
No. 471TE082 .....**$2,560.00**

BK PRECISION

Use instead of a more expensive LCR bridge!

889A Bench LCR/ESR Meter with Component Tester

- Measure inductors, capacitors and resistors with a basic accuracy of 0.1%
- Auto or manual ranging
- General purpose digital voltage meter

Specs: Voltage Measurements; AC: True-RMS up to 600Vrms; DC: Up to 600V; Input Impedance: 1MΩ; Open Circuit Voltage: 5Vdc; Short Circuit Current: 2.5mA. ***One-Year Warranty.*** (Taiwan)

No. 310TE889.....**$1425.00**

LEASING AVAILABLE!

BK PRECISION

570A Linear IC Tester

Compact, handheld, battery powered testers offer advanced functionality and ease of use. The 2-line x 16 character dot matrix LCD shows the result of the test as a PASS or FAIL, together with individual pin diagnostics, test made, and possible equivalents. Contains built-in test library includes all common Analog ICs including op-amps, comparators, voltage regulators, voltage references, analog switches & multiplexes, opto-isolators & couplers, and audio ICs.

Features:

- Auto identification mode
- Conditional/Unconditional loop testing mode
- Functional test unit emulates passive circuitry to implement a comprehensive test in a variety of configurations and gain settings
- Displays diagnostic information down to individual component pins
- Rugged, hand held, battery operated
- Built-in membrane keypad, 2 x 16 dot matrix alphanumeric LCD, and high quality 16 pin ZIF socket

Includes: (4) AA batteries; instruction manual. ***One-Year Warranty***

No. 310TE5701 .....**$1457.29**

AMPROBE **New!**

LCR55A Handheld Component Tester

Dedicated LCR meter with inductive, capacitance and resistance and more. Front knob to zero out stray values and large 0.7" LCD.

Includes: Holster, test leads, and screw-on alligator clip.

Features:

- Measures inductance, capacitance, resistance, transistors, diodes and microwave diodes
- Plug-in test slots and test leads with threaded alligator clips
- Low 20 Ohm range with zero adjustment knob for lead resistance
- Oversized, read-at-a-glance display
- Data Hold and Max Hold to freeze measurement on the display
- Auto-off to save battery life
- Includes protective holster

No. 374TE2278 .....**$179.95**

Digital Decade Substituters For Resistance, Capacitance and Inductance

Economical, indispensable tools for a variety of uses in engineering, design, troubleshooting or service!

- Just dial in your value for instant operation
- Direct reading, no fumbling with multiple rotary switches
- Different color switches separate the various impedance ranges
- Error proof because it's made with rotary switches
- Made of high impact plastic

A RC-Box B L-Box C R-Box D C-Box

TT No.	Model	Type of Substituter	Decades	Range	Resolution	Accuracy	Type of Components	PRICE
A. 455ME502	RCS-502	Precision Resistance/Capacitance	Combines the RS-201 and CS-301					$802.85
455ME500	RCS-500	Resistance/Capacitance	Combines the RS-200 and CS-300					$430.85
B. 455ME400	LS-400	Wide Range Inductance	4	0-9.999H	1mH	±(2%+0.5μH)	Toroidal Inductors	$1,186.85
C. 455ME200	RS-200	Resistance	7	0-9,999,999Ω	1Ω	±(1%+25MΩ)	Metal film resistors; wirewound or resistance wire for 0.9 ohms and under	$208.85
455ME202	RS-200W	Wide Range Resistance	9	0-99,999,999Ω	0.1Ω	±(1%+30MΩ)		$388.85
455ME203	RS-201W	Wide Range Precision Resistance	9	0-9,999,999Ω	0.1Ω	±(0.1%+25MΩ)		$646.85
455TE201	RS-201	Precision Resistance	7	0-99,999,999Ω	1Ω	±(0.1%+30MΩ)		$388.85
D. 455ME300	CS-300	Capacitance	6	0-99.9999Ω	100pF	±(4%+3pF)	Mica, Polystyrene, Polycarbonate, Polyester & Polarized Tantalum	$226.85
455TE301	CS-301	Precision Capacitance	6	0-99.9999Ω	100pF	±(1%+ 3pF)		$418.85

EXTECH INSTRUMENTS A FLIR COMPANY

Resistance Decade Box

1% Resistance substitution from 1 to 11, 111, 110Ω. Seven decade ranges. Values can be set in 1Ω increments. (China) ***One-Year Warranty.***

No. 355TE004 (380400) **$99.99**

Capacitance Decade Box

5% Capacitance substitution from 100pF to 11, 111μF. Five decade ranges. (China) ***One-Year Warranty.***

No. 355TE504 (380405) **$129.99**

Case may be grounded separately. Three binding posts permit isolated substitutions.

Demagnetizers

GC/Waldom

Hi-Power Degaussing Coil

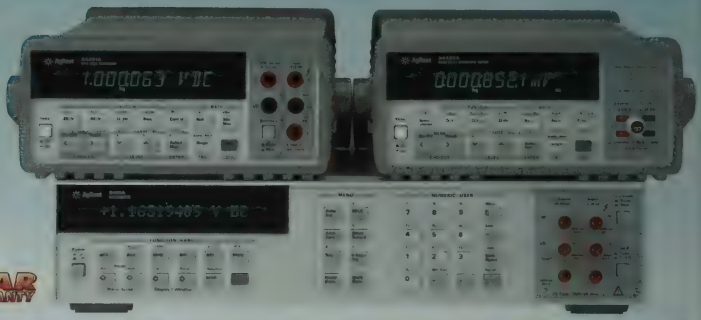
Eliminate magnetic fields in CRT's and computer monitors before purity adjustment. Coil encased in a hi-impact 13" dia. molded, plastic housing. Supplied with 8' cord and momentary contact switch to de-energize coil.

No. 388MI317.....**$63.36**

Benchtop Multimeters

Agilent Technologies

Authorized Distributor



Digital Multimeters

The Agilent 344XXA multimeter is a tool kit of useful testing functions. In addition to the standard functions you've come to expect from a high quality digital multimeter, you also get many other capabilities, from min/max/avg to built-in limit testing. Precision measurements for an affordable price means you can make measurements with confidence without breaking your budget. ***One-Year Warranty.*** **(USA)**

1 YEAR WARRANTY

Side-by-side comparison

Model	34405A	34401A	34410A	34411A	34420A	3458A
TT No.	431TE4405	431TE401	431TE4410	431TE3441	431TE3442	431TE3458
Type	Digital multimeter, 5-1/2 digits	Digital multimeter, 6-1/2 digits	Next generation high performance digital multimeter, 6-1/2 digits with dual display	Next generation high speed digital multimeter, 6-1/2 digits with waveform capture	NanoVolt/micro-Ohm meter, 7-1/2 digits	Reference digital multimeter, 8-1/2 digits
Key Features	*Value price *Simultaneous reading of DC/AC *12,000 counts resolution *SCPI language compatible *16 measurement functions	*Min/max/avg *Built-in limit testing *.0035% basic DC accuracy *.06 basic AC accuracy *1,000 readings/sec. *Configuration rates: 26/sec to 50/sec.	*10,000 readings/sec. *Precise triggering *Maximum versatility *Datalogging wizard *Resistance/frequency *Standard LAN, USB, GPIB	*50,000 readings/sec. *1M reading memory *Analog level, pre/post triggering *Capacitance/temperature *Standard LAN, USB, GPIB	*High Sensitivity *Optimized for low level measurements *Combines low noise voltage measurements with resistance/temperature	*100,000 readings/sec. *Highest performance *Unsurpassed, throughput accuracy *8-ppm 1 year dcV accuracy *0.05 ppm dcV transfer accuracy *Superior AC voltage measurements
Basic measurements	dc & ac voltage, dc & ac current, 2 wire, frequency	dc & ac voltage, dc & ac current, 2 & 4 wire, frequency & period	dc & ac voltage, dc & ac current, 2 & 4 wire, frequency & period, 10,000 readings/sec.	dc & ac voltage, dc & ac current, 2 & 4 wire, frequency & period, 50,000 readings/sec., analog level trigger	dc voltage, 2 & 4 wire, low power resistance, ratio	dc & ac voltage, dc & ac current, 2 & 4 wire, frequency & period
Additional measurements	Continuity, diode test, capacitance, temperature	Continuity, diode test	Continuity, diode test, capacitance, temperature	Continuity, diode test, capacitance, temperature	2 channels - ratio and difference	3 modes of true RMS, digitizing
Temperature	Thermistor Probe	RTD, Thermistor	RTD, thermistor	RTD, Thermistor, Thermocoupler	Direct SPRT, RTD	Thermistor, RTD
Measure Speed (digits)	DC: 15/sec@(5 1/2) DC: 70/sec@(4 1/2) AC: 2.5/sec@(5 1/2) AC: 2.5/sec@(4 1/2)	6/sec@(6 1/2) 300/sec@(5 1/2) 1,000/sec@(4 1/2)	1,000/sec@(6 1/2) 10,000/sec@(5 1/2)	1,000/sec@(6 1/2) 10,000/sec@(5 1/2) 50,000/sec@(4 1/2)	0.3/sec@(7 1/2) 3/sec@(6 1/2) 100/sec@(5 1/2)	5,300/sec@(6 1/2) 50,000/sec@(5 1/2) 100,000/sec@(4 1/2)
Math functions	Null, dBm full speed, USBTMC Class Device (GPIB over USB)	Null, statistics, dBm, dB, Limit test	Null, statistics, dBm. dB, Limit test	Null, statistics, dBm. dB, Limit test	Null, statistics, dBm. dB, Limit test, scale, offset, filter, moving avg. filter	Null, statistics, dBm. dB, Limit test, scale, offset, filter, % error
Connectivity	USB 2.0	IntuiLink software with built-in GPIB and RS-232	LAN, USB 2.0, and GPIB standard, web browser interface,	LAN, USB 2.0, and GPIB standard, web browser interface, IntuiLink software	Standard IntuiLink software, RS-232 and GPIB interface	GPIB interface
PRICE	$749.00	$1,070.00	$1,295.00	$2,003.00	$3,820.00	$8,080.00

BK PRECISION®

5-1/2 Digit Dual Display Benchtop Multimeter

Dual display with selectable count resolutions up to 120,000. For bench-top, field service, and system applications with a high performance to price ratio. **Includes:** Test leads. ***One-Year Warranty.*** (Taiwan)

- Selectable resolutions of 120,000, 40,000 & 4,000
- True RMS (AC, AC+DC), 40 Hz to30 kHz bandwidth
- Selectable 2 or 4 wire resistance measurements
- RS-232 interface, GPIB
- MIN/MAX: Data Hold

120,000 count dual display benchtop multimeter
No. 310TE5492 .....$715.00

50,000 count dual display benchtop multimeter
No. 310TE5491 .....$409.00

FLUKE.

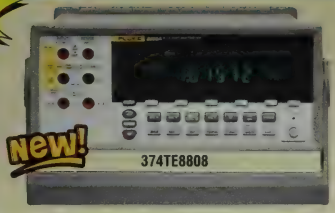
8845A, 8846A and 8808A 6.5 Digit Precision Multimeters

Precision and versatility to handle your most demanding measurements on the bench or in a system. High performance and feature rich, yet remarkably easy to use. **(USA)**

Create your own custom forms with FlukeView Designer Software!

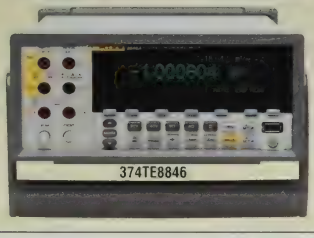
Features:

- 6.5 digit resolution
- Basic VDC accuracy up to 0.0024%
- Dual display
- 10A current range
- Wide ohms range
- 2 x 4 wire ohms measurement technique
- Measures frequency, period capacitance & temperature
- USB memory drive port (8846A)
- Graphical display
- Fluke 45 & Agilent 34401A emulation
- Advanced analysis capability with Trendplot paperless recorder mode, statistics & histogram



374TE8808

374TE8845


374TE8846

Model	8808A	8845A	8846A
TT No.	**374ME8808**	**374TE8845**	**374TE8846**
Display	Dual, Graphical	Dual, Graphical	Dual, Graphical
VDC Range	1000V	1000V	1000V
VDC Accuracy	0.015 + 0.003	0.0035% +5ppm	0.0024% + 2ppm
VAC Range	750V	750V	1000V
VAC Accuracy	0.2 + 0.05	0.06% +0.03% Rng	0.06% + 0.03% Rng
VAC Frequency Response	100 kHz	300 kHz	300 kHz
A AC/DC range	10A	10A	10A
Ohms	200 to 100 M	100 to 300 M	10 to 1G
2x4 Wire Ohms	Yes (test leads included)	Yes (test lead set optional)	Yes (test leads included)
Frequency and period	20 Hz to 1 MHz (Freq only)	3 Hz to 300 kHz	3 Hz to 1 MHz
Continuity and diode	Yes	Yes	Yes
Capacitance	–	No	1 nF to 50 mF
Temperature	–	No	RTD
Interfaces	RS-232, USB via adapter cable	GIPB, RS-232, LAN USB via adapter cable	GIPB, RS-232, LAN USB via adapter cable
Removable memory	–	No	USB memory drive port
Mathematics	Min/Max	Min/Max/Avg; Hi/Lo Limit; mX+b	Min/Max/Avg; Hi/Lo Limit; mX+b
PRICE	**$745.00**	**$995.00**	**$1,395.00**
With FlukeView Designer Software	**374ME8809**	**374TE0845**	**374TE0846**
PRICE	**$945.00**	**$1,195.00**	**$1,595.00**

CAT III, 1000V

431TE1252

Agilent Technologies

Authorized Distributor

Check more, fix more, spend less!

Handheld Digital Multimeters

New!

Full featured handheld multimeters that offer maximum versatility for current and future needs and give you more performance and functions than any other DMM in its class. The Agilent U1240A and U1250A Series feature accuracy up to 0.025%, true RMS, temperature, capacitance and frequency measurements on top of data-logging and PC connectivity capability.

- 4-1/2 digit, 50,000 count display (U1251A/U1252A)
- 4-digit, 10,000 count display (U1241A/U1242A)
- True RMS measurement capacity
- Math functions
- Meter battery charging (U1252A)
- 20 MHz frequency counter (U1252A)
- Data-logging standard and PC connectivity via IR-USB cable (optional U1251A/U1252A)
- Programmable square wave generator (U1252A)
- Multifunction tilt stand - Vertical: 30°, 60° or hanging kit (U1251A/U1252A); U1241A/U1242A only stands at one angle and does not flip into a hanging kit.

Includes: Meter; Test Lead Kit; Getting Started Guide; Product Reference CD; Test Report and Calibration Certificate; Soft carrying case (U1251A/U1252A)

Model	U1241A	U1242A	U1251A	U1252A
TT No.	**431TE2412**	**431TE2422**	**431TE1251**	**431TE1252**
True RMS	AC	AC	AC	AC+DC
Basic DCV Accuracy	0.09%	0.09%	0.03%	0.025%
Manual & Autoranging	Yes	Yes	Yes	Yes
Voltage	1000V	1000V	1000V	1000V
Current	0.1μA–10 mA	0.1μA–10 mA	0.1μA–10 mA	0.1μA–10 mA
Resistance	100 M-	100 M-	50 M-	500 M-
Capacitance	0.1 nF-10 mF	0.1 nF-10 mF	0.001 nF-100mF	0.001 nF-100 mF
Frequency	100 kHz	100 kHz	1 MHz	20 MHz
Temperature	K, T1	J & K, T1, T2, T1-T2	K, T1	J & K, T1
Continuity with Beeper	Yes	Yes	Yes	Yes
Diode Test	Yes	Yes	Yes	Yes
Switch Counter	Yes	Yes	No	No
Square Wave Generator	No	No	No	Yes
Battery	4 x AAA	4 x AAA	9V	NI-MH Rechargeable
PRICE	**$200.00**	**$220.00**	**$399.00**	**$429.00**

SAVE $150 IN FREE ACCESSORIES ON THE U1251A & U1252A:

In addition to the standard accessories both of these models come bundled with all the essential accessories you need at no extra cost, including calibration, a complete set of test leads, probes and alligator clips, SMT grabber, 9V battery, and a rugged carrying case. U1252A also includes a rechargeable Ni-MH battery and battery charger with power cable.

You'd pay $150 for these individually.

***STANDARD DMM FUNCTIONS:** ■ AC volts ■ DC volts ■ Ohms ■ Diode test ■ Auto and manual reading ■ Continuity

FLUKE.

80 Series V
Industrial Multimeter

- Unique function for accurate voltage and frequency measurements on adjustable speed motor drives and other electrically noisy equipment (87-V, 87-V/E)
- Built-in thermometer allows you to take temperature readings without having to carry a separate instrument (87-V, 87-V/E)
- Withstands hazardous 8,000 volt spikes caused by load switching and faults on industrial circuits and complies with second edition IEC and ANSI electrical safety standards
- True-rms AC voltage and current for accurate measurements on non linear signals (87-V, 87-V/E)
- 4-1/2 digit mode for precise measurements
- 10,000µF capacitance range for components and motor caps
- Measure up to 1000V ac and dc. Measure up to 10 A, 20 A for up to 30 seconds
- Auto and manual ranging for maximum flexibility
- Analog bar graph
- Frequency to 200 kHz and % duty cycle
- Min/Max and average recording to capture variations automatically
- Resistance, continuity and diode test
- Removable holster with built-in test lead and probe storage
- ***Limited Lifetime Warranty*** **(USA)**

CAT IV, 600V
CAT III, 1000V

87-V

Function	Range & Resolution	Basic Accuracy 83-V	Basic Accuracy 87-V TRMS
Voltage DC	1000V	±(0.1%+1)	±(0.05%+1)
Voltage AC	1000V	±(0.5%+2)	±(0.7%+2) True RMS
Current DC	10A (20A for 30 seconds max)	±(0.4%+2)	±(0.2%+2)
Current AC	10A (20A for 30 seconds max)	±(1.2%+2)	±(1.0%+2) True RMS
Resistance	50 M- max.	±(0.4%+1)	±(0.2%+1)
Capacitance	9,999 µF max.	±(1%+2)	±(1%+2)
Frequency	200 kHz max.	±(0.005%+1)	±(0.005%+1)
Duty Cycle	99.9%	±(0.2% per kHz +0.1%)	±(0.2% per kHz +0.1%)
Temperature	**Fluke 87V:** -200°C - 1-90°C, -328.0°F - 1994.0°F; excluding probe	–	–
80 BK Temp Probe	-40°C - 260°C (-40°F - 500°F)	–	2.2°C or 2% whichever is greater
Conductance	60.00 nS	±(1.0%+10)	±(1.0%+10)
Diode	3 V	±(2%+1)	±(2%+1)
TT No.		374TE835	374TE087
PRICE		$359.95	$359.95
Calibrated TT No.		374TE2835	374TE0871
PRICE		$409.95	$409.95

FLUKE.

87-V/E2 Industrial Combo Kit

Includes: 87-V Industrial Multimeter; 1.5m silicone leads resist heat; Removable probes with 4mm of exposed metal for use on industrial circuits; Retractable long reach alligator clips; K-type temperature probe; Magnetic hanger to position and hold meter to steel surfaces; Durable soft carrying case.

No. 374TE876.....**$419.95**

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.

We reserve the right to correct misprints.

FLUKE.

Best Seller

Replaces the 77-3!

Fluke 77-IV DMM

Versatile meter for field service or bench repair. Simple to use. **Features:** Large backlit display; Min/Max to record signal fluctuations; Integral holster with probe holders; Auto and manual ranging; Meets 1000V CAT III and CAT IV 600V standards.

- 0.3% accuracy
- 10A continuous
- Wide 1000V measurement range
- Average responding ac measurements
- Frequency & capacitance
- Resistance & continuity

SAME DAY Calibration & Shipping

Includes: Test leads, 9V battery, user manual. ***Limited Lifetime Warranty.*** **(USA)**

No. 374ME774 Fluke-77-4.....**$249.95**

Fluke 77-IV

FLUKE.

Water PROOF

Fluke 27 Totally Sealed Digital Multimeter

A special case with o-rings prevent water form entering the input jacks, switches and fuse door. Meets military specifications for vibration shock and water resistance. It is totally sealed, waterproof to 3' (1M) of water for one hour, tough enough to withstand contaminates, chemicals, accidental drops and severe electrical overloads. Performs under the extremes of heat, cold, humidity, shock, electromagnetic interference, vibration and abuse. Designed to meet mil. Spec. MIL-STD-28800 for style A, Class 2 instruments. **Specs**: 3200 count display; 31 segment analog bar graph; autoranging; TouchHold function captures and locks the measurement and automatically updates with the next measurement; Conductance for high resistance measurements; MIN/MAX and relative modes. ***Limited Lifetime Warranty.***

No. 374ME027 Fluke-27 .....**$419.95**

No. 374TE227 Fluke-27 Calibrated **$482.95**

CAT III, 1000V

*STANDARD DMM FUNCTIONS:			
	■ AC volts	■ DC volts	■ Ohms
	■ Diode test	■ Auto and manual reading	■ Continuity

FLUKE 113, 114, 115, 117 True RMS Digital Multimeters

True-rms CAT III 600V

Features:

- True RMS
- 6000 counts
- Large backlit display for easy visibility
- Min/Max recording
- Display hold
- VoltAlert™ Non-contact voltage detection (Models 114 and 117)
- Detect AC voltage without carrying a second tool
- AutoV™ Automatic volts detection (Models 114 and117)
- Automatically determines AC or DC voltage eliminating guesswork
- Correctly displays voltage measurement without extra steps
- LoZ™ Low impedance (Models 113, 114 and 117)
- Optional TPAK magnetic hanger allows hands-free operation

Type	Utility	Electrical	Field Service	Electrician's
Model	113	114	115	117
TT No.	374TE113	374TE0411	374TE0511	374TE0711
LoZ	X	X	-	X
AutoV	-	X	-	X
VoltAlert	-	-	-	X
Current AC DC	-	-	X	X
Frequency	-	-	X	X
Capacitance	-	-	X	X
PRICE	$119.95	$129.95	$156.95	$186.95

NEW!

$108.02 IN KIT SAVINGS!

117 Electrician's DMM Combo Kit

Includes: 117 DMM, 322 Clamp Meter, Velcro pipe clamp; Hard point test lead set, Integrated temperature probe, Carrying case.

No. 374TE1732 .....$267.95

FLUKE Fluke 175, 177 and 179 True RMS Digital Multimeter with Backlight

True-rms

- All standard DMM functions*
- 6000 count display
- 0.15% basic DC accuracy (175)
- 0.09% basic DC accuracy (177, 179)
- MIN/MAX/Average
- Auto Hold and Manual Hold
- Battery door opens without breaking calibration seal
- Compatible with TPAK meter hanging kit
- Capacitance measurement range 1 nF to 9999 µF
- 0.1Ω to 50.00 MΩ range
- True-rms AC range 0.1 mV to 1000V
- 0.1 mV to 1000V DC range
- True-rms AC range 0.01 mA to 10.00A (20A overload for 30 seconds)
- Backlight (177, 179)
- 0.01 mA to 10.00 mA dc range (20A overload for 30 seconds)
- Frequency measurement range through voltage input 2 Hz to 99.99 kHz
- Temperature measurements in °C and °F, thermocouple included (179)

CAT IV, 600V
CAT III, 1000V

SAME DAY Calibration & Shipping

LIFETIME WARRANTY

Fluke 175
No. 374TE175 .....$237.95
Fluke 177
No. 374TE177 .....$247.95
Fluke 179 (Shown)
No. 374TE179 .....$249.95
Fluke 175 Calibrated
No. 374TE0175 .....$287.95
Fluke 177 Calibrated
No. 374TE0177 .....$297.95
Fluke 179 Calibrated
No. 374TE0179 .....$307.95

FLUKE Electronics Multimeter and Deluxe Accessory Kit

$138.72 IN KIT SAVINGS!

Rugged 1000 V CAT III Fluke 179 multimeter with TL224 SureGrip™ silicone test leads, TL910 electronic test probes, AC280 SureGrip™ heavy duty hook clips, 80BK integrated temperature probe, ToolPak™ meter handing accessory, lightweight soft case.

No. 374TE1797.....$292.95

FLUKE Electrician's Multimeter and Voltage Tester Combo Kit

$132.72 IN KIT SAVINGS!

Rugged 1000 V CAT III Fluke 179 multimeter with AC220 SureGrip™ alligator clips; TP220 SureGrip™ test probes; TL224 SureGrip™ silicone test leads, ToolPak™ magnetic meter hanger, 1-AC II non-contact voltage detector, lightweight soft case.

No. 374TE1792 .....$292.95

FLUKE.

True-RMS logging multimeters with TrendCapture!

280 Series Multimeters

The next generation high performance multimeters designed to meet the challenges of today's industrial and field service professionals. Recorded data can be viewed on the meter in TrendCapture or transferred to a PC with optional FlukeView forms software. TrendCapture plots measurements as single line to help detect anomalies. Advanced features are combined with True-RMS 50,000 count 1/4 VGA dot matrix display.

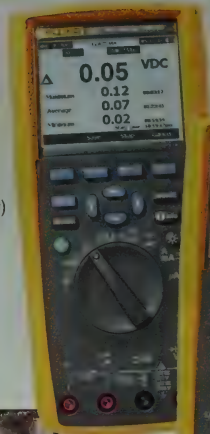
Features:

- 50,000 count, 320 x 240 dot matrix, backlit LCD display
- Multiple sets of measurement information can be read on display
- Record events and trends helpful for troubleshooting intermittent problems or profiling loads
- Name & recall saved measurements made in the field
- Internal memory allows stand-alone logging for up to 180 hours (Model 289)
- Optical USB PC communication interface allow for easy document download to FlukeView Forms software
- F1-F4 Soft Keys provide flexible user function menus
- "i" info button on meter activates help screen for measurement functions
- Navigation keys allow you to quickly select menu choices and scroll through the information screens
- Separate 50 ohm range for motor winding and low ohm measurements (Model 289)
- LoZ - low input impedance function helps prevent false reading due to ghost voltage (Model 289)
- Lo Pass filter allows for accurate measurement on motor drives (Model 289)
- Field upgradeable and expandable as new capabilities become available
- ***Limited-Lifetime Warranty***

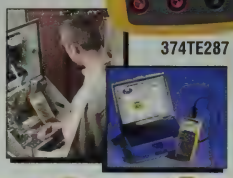
Specifications

- True-rms readings: AC + DC
- Basic DC accuracy: 0.025%
- Voltage AC/DC: 1000V
- Current AC/DC: 10A • Resistance: 500M
- Frequency: 1 MHz • Capacitance: 100 mF
- Temperature: +1350°C
- Fast/Min/Max: 250 µs
- Input alert: Yes
- CAT III measurements: 1000V
- CAT IV measurements: 600V

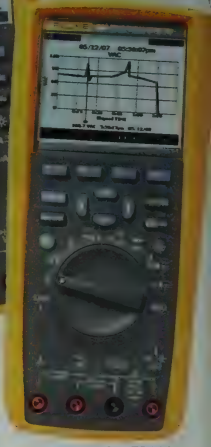
Model 287
TT No. 374TE287 .....$514.95
Model 289
TT No. 374TE289 .....$544.95



True-rms
CAT III, 1000V
CAT IV, 600V



374TE287



374TE289

Fluke 287 Combo Kit

Save big by buying a Fluke 287 multimeter, FlukeView software, 80BK-A thermocouple probe, CAT III 1000V 10A modular test leads and test probes (red, black), CAT II 300V 5A alligator clips (red, black), and meter case together in one kit.

No. 374TE2871 with Fluke C280 soft case.
~~Reg. $799.26~~ **NOW $585.95** ***Save $213.31***

No, 758TE287 with Pelican hard case. Case is waterproof, crushproof, comes with cut-out foam to protect unit.
~~Reg. $855.09~~ **NOW $635.95** ***Save $219.14***

Fluke 289 Combo Kits

Save big by buying a Fluke 289 multimeter, Fluke premium silicon test leads, alligator clips, 80BK integrated DMM temperature probe, FlukeView software and cable together in one kit.

No. 758TE289 in durable yellow Pelican hard case. Case is waterproof, crushproof, comes with cut-out foam to protect unit.....Reg. ~~$904.47~~ **NOW $665.95** ***Save $238.52***

No. 374TE2890 in Fluke C280 soft case.....Reg. ~~$848.64~~ **NOW $615.95** ***Save $232.69***

FREE FLUKEVIEW SOFTWARE
While supplies last!

Pelican Hard Case shown with Fluke 287

TECHNI-TOOL EXCLUSIVE

Fluke C280 Soft Case shown with Fluke 289

FLUKE. **Test Leads & Accessories**

TL71 Precision Probe Assembly

Best Sellers

Comfort-grip probe with silicone-insulated test leads, and integral strain relief. Recommended for µV measurements. Safety-shrouded, right-angle inputs. 48" (1.2m). 1000V; 10A. **(USA)**
No. 374AC071 .....$20.81

TL40 Retractable Tip Test Lead Set

- Tips adjust from 0 to 3.0" (0 to 76mm)
- Stainless steel pins
- Insulated test leads
- CAT. III, 300V; 3A. **(USA)**

No. 374TE040 .....$33.53

TL80A Basic Electronic Test Lead Set

- 2 leads with banana connector & test probe
- 2 alligator clips
- 2 tip extenders. **(USA)**

No. 374AC154.....$54.44

CAT II, 300V

H900 Test Lead Holder

- Heavy-duty construction with mounting holes
- 10 slots for wires up to 0.320" dia.
- Overall dims: 11"L x 3.5"W x 1.25"H

One-Year Warranty. **(USA)**

No. 374TE0900 .....$18.53

TLK287 Electronics Master Test Lead Set

The perfect test lead kit for today's electronics test and design **Includes**: Precision electronic probes with multiple spring-loaded sharp tips to maximize contact with SMD test points -Micro-grabbers and leads to enable fine SMD test - Mini-alligator clips, grabbers, and probes for virtually every electronics need -Both modular test leads and lead-probe combinations. Even couplers for long lead applications.
No. 374TE4563 .....$114.95

AC72 Push-On Alligator Clips

Slide-on style for test probes. Jaws open to 8mm. CAT. III, 1000V; CAT. IV, 600V; 10A. ***One-Year Warranty.*** **(USA)**
No. 374AC0702 .....$12.73

Multimeter and Loop Calibrator – all in one!

Fluke 787 and 789 ProcessMeter™

The Fluke 787 was the first tool in the industry to combine a loop calibrator with a DMM, giving process technicians double the power in one tool. Now it's even better. The Fluke 789 has a display that's twice as large and twice as bright. With its built-in selectable 250-Hart® resistor, it eliminates the need to carry a separate resistor with you. Now you can do a lot more while carrying a lot less.

Fluke 789 Features:
24V loop power supply; 20 mA drive into 1200 ohms; 0-100% mA span check buttons to toggle from 4-20 mA; Infrared I/O serial port compatible with FlukeView® software; 5V measurement capability on the 4V range for precise 1-5V measurements.

Fluke 787 and 789 Feature:
Simulated mA and % scale readout on mA output; 25% manual step plus auto step and auto ramp on mA output; Clear LCD with backlight; 4,000 counts (30,000 counts for dc current); Min, Max, Avg, Hold, Relative modes.

Includes: (Fluke 787) C81Y protective yellow holster with FlexStand™, TL75 safety-designed test lead set plus AC72 alligator clips, one 9V alkaline battery (installed), user manual on CD. (Fluke 789) TL71 premium safety-designed test lead set plus alligator clips, 4 AA alkaline batteries (installed), user manual on CD. ***Three-Year Warranty.*** **(USA)**

No. 374ME787 Fluke-787 .....**$699.00**
No. 374TE0789 Fluke-789 .....**$795.00**

Fluke 789

CAT III, 600V

Fluke 787

Fluke 741B, 743B and 744 Documenting Process Calibrators

Whether you're calibrating instruments, troubleshooting a program, or running planned maintenance, the multifunction Fluke 740 Series Documenting Process Calibrators help get the job done faster. **Features:** Calibrate temperature, pressure, voltage, current, resistance and frequency; Measure pressure using Fluke 700 pressure modules; Measure any source with one compact, rugged, reliable tool; Create and run automated as found/as left procedures. Supports linear, square-root devices plus one-point and two-point limit switches; Record, document and transfer results to PC; Auto step and auto ramp functions; Measures custom units and user entered values; Fluke 744 has all the features of a 743B plus Hart® communication functions. **Specs:** Data log: Measures V and mA, ohms, frequency, temperature, and pressure. One to 60 readings per minute. 8000 readings max.; Ramp: Source V, mA, frequency, and temperature. Four steps/sec.; Trip, detect on continuity or voltage; Loop power: Selectable, 24V or 28V; 22 mA max; NiCad 7.2V internal battery pack; Calculators: 4 functions plus square-root, store and recall are built-in. **Includes:** TL224 industrial test leads (2 sets); AC220 test clips (2 sets), TP220 test probe, BP7217 battery pack and charger; instruction manual;, NIST traceable calibration certificate with data, serial port cable (Model 743B only), DPC/TRACK sample version with free PC communications utility software (Models 743B and 744 only). ***Three-Year Warranty.*** **(USA)**

No. 374TE7044 Fluke-741B **$3,695.00**
No. 374TE7045 Fluke-743B **$4,695.00**
No. 374TE7046 Fluke-744 .....**$5,695.00**

LEASING AVAILABLE!

Pressure Enabled

Fluke 741B

Fluke 743B

Fluke 726 Multifunction Process Calibrator

Process Calibrator is designed specifically for the Process industry with broad workload coverage, calibration power and unsurpassed accuracy in mind. The 726 measures and sources almost all process parameters and can calibrate almost anything. The 726 will also interpret results without the help of a calculator and store measurement data for later analysis. **Features:** Two separate channels; measure, source and view process signals simultaneously; Measure volts, mA, RTDs, thermocouples, frequency, and resistance to test sensors and transmitters; Source/simulate volts, mA, thermocouples, RTDs, frequency, and pressure to calibrate transmitters; Source mA with simultaneous pressure measurement to conduct valve and I/P tests; Integrated pressure switch test allows you to capture the set, reset and deadband of a switch; Memory storage for up to 8 calibration results. Measure pressure using Fluke 700 pressure modules. ***Three-Year warranty.***

No. 374TE726 .....**$2,695.00**

Fluke 725 Multifunction Process Calibrator

Use the measure and source functions in the Fluke 725 to test and calibrate almost anything. Easy-to-read screen lets you view input and output simultaneously. Measure pressure and frequency to test sensors and transmitters. Measure pressure using Fluke 700 pressure modules. Source mA with simultaneous pressure measurement to conduct valve and I/P tests. Support flow meter testing with frequency and counts per minute (CPM) functions. Remote interface allows benchtop automated operation. Features: Easy-to-read measure/source backlit screen; Perform fast linearity tests with auto step and auto ramp features; Power transmitters with internal loop supply; Store frequently-used test setups for later use; Measure, source, simulate volts, mA, RTDs, thermocouples and ohms to calibrate transmitters. Includes: TL75 test leads, AC72 test clips, one pair stackable test leads, user manual on CD; NIST-traceable certificate of calibration. ***Three-Year Warranty.***

No. 374TE7043 .....**$2,095.00**

Pressure Enabled

Fluke 726

Fluke 725

EXTECH INSTRUMENTS A FLIR COMPANY

Best Seller

Optional Software No. 355TE8100

MultiMaster® Series Precision MultiMeters

Precision 0.02% basic accuracy and a high resolution 50,000/ 500,000 count display. Features include AC/DC current to 10A; 4 to 20 mA displayed as 0 to 100% for process current measurements. dBm, relative, peak hold, RS-232 PC Interface, adjustable trigger level for frequency measurements (MM570 Only). MM570 with dual input temperature displays T1, T2 or T1-T2. **Includes:** Multimeter w/stand, test leads, type K-Type thermocouple probe, holster, 9V battery. ***Three-Year Warranty.*** (Taiwan)

Cat IV, 600V

355TE570

Model	MM560	MM570
TT No.	355TE560	355TE570
Description	True RMS	True RMS w/Temperature
Display	50000/500000 Backlit	50000/500000 Backlit
Basic Accuracy	±0.03% (DCV)	±0.02% (DCV)
PC Interface	Yes	Yes
AC Voltage	0.001mV to 1000V	0.001mV to 1000V
DC Voltage	0.001mV to 1000V	0.001mV to 1000V
AC/DC Current	0.01µA to 10.00A	0.01µA to 10.00A
Resistance	0.01- to 50M-	0.01- to 50M-
Capacitance	0.01nF to 9999µF	0.01nF to 9999µF
Line Frequency	0.0001Hz to 200kHz	0.0001Hz to 200kHz
Logic Frequency	0.0001Hz to 2MHz	0.0001Hz to 2MHz
Temperature	–	-58 to 1832°F
Diode/Continuity	Yes	Yes
PRICE	**$239.99**	**$309.99**

MultiMaster™ Software Diskette and Serial Cable
No. 355TE8100 .....**$79.99**

EXTECH INSTRUMENTS A FLIR COMPANY

From $149.99

Optional Software No. 355TE801

MultiPro® Series Professional MultiMeters

Designed for accuracy (0.08%) and everyday professional use. 20kHz ACV bandwidth, low resistance auto-lead zero, and rugged design. Models with True RMS, temperature and peak hold. Has RS-232 PC interface. **Includes:** Multimeter w/stand, holster, 9V battery, & temperature probe (355TE112 only). ***Three-Year Warranty.*** (Taiwan)

Cat IV, 600V

355TE112

Model	MP510	MP530
TT No.	355TE109	355TE112
Description	Multimeter	True RMS w/Temperature
Display	5000 Counts Backlit	5000 Counts Backlit
AC Voltage	0.01mV to 1000V	0.01mV to 1000V
DC Voltage	0.01mV to 1000V	0.01mV to 1000V
AC/DC Current	0.1µA to 20.00A	0.1µA to 20.00A
Resistance	0.01- to 50M-	0.01- to 50M-
Capacitance	0.01nF to 9999µF	0.01nF to 9999µF
Frequency	0.001Hz to 125kHz	0.001Hz to 125kHz
Temperature	-	-58°F to 1832°F
Diode/Continuity	Yes	Yes
PRICE	**$149.99**	**$189.99**

MultiPro® Software Diskette and Serial Cable
No. 355TE801 .....**$49.99**

EXTECH INSTRUMENTS A FLIR COMPANY

Waterproof

Heavy Duty Waterproof Multimeters

Double molded for waterproof (IP67) protection. Heavy duty, rugged design and drop-proof to 6 feet. **Features:** 1000V input protection on all functions; Dual sensitivity frequency functions; Large backlit LCD with bargraph; Diode open circuit voltage of 2.8VDC continuity; Auto power off with disable feature; Min/Max/ Relative/Data Hold; Peak Hold (Model EX530). **Includes:** Test leads, Magnetic hanging strip, Type K bead wire temperature probe and 9V battery. ***Three-Year Warranty.***

CAT IV, 600V

355TE505

Model	New! EX505	EX520	EX530
TT No.	355TE505	355TE520	355TE521
Description	True RMS w/Temp.	True RMS w/Temp.	True RMS w/Temp.
Display Counts	4000	6,000	40,000
True RMS	Yes	Yes	Yes
DC Voltage	1000V	0.1mV to 1000V	0.01mV to 1000V
AC Voltage	1000V	1mV to 1000V	0.1mV to 1000V
DC/AC Current	10A	0.1µA to 20A	0.01µA DC/ 0.01µA AC to 20A
Resistance	40M-	0.1- to 60M-	0.01- to 40M-
Capacitance	100µF	0.01nF to 1 mF	0.001nF to 40mF
Frequency (electrical)	5 Hz to 1 KHz	10 Hz to 400 Hz	10 Hz to 400 Hz
Frequency (electronic)	0.001 Hz to 10 MHz	0.01 Hz to 40 MHz	0.001 Hz to 100 MHz
Temperature (Type K)	-50° to 1382°F; -45° to 760°C	-50° to 1382°F; -45° to 750°C	-50° to 1382°F; -45° to 750°C
Duty Cycle	0.1 to 99.9%	0.1 to 99.9%	0.1 to 99.9%
Diode/Continuity	Yes	Yes	Yes
PRICE	**$109.99**	**$169.99**	**$209.99**

EXTECH INSTRUMENTS A FLIR COMPANY

Mini Pocket Multimeter

Autoranging with 10 functions including Frequency, Capacitance, and Duty Cycle.

Features:

- Relative and Data Hold
- Diode test and continuity beeper
- Over-range and low battery indication

Specs: DC and AC voltage: 500V; AC/DC Current: 400mA; Resistance: 400 to 40M-; Capacitance: 100µF; Frequency: 9Hz to 10MHz; Duty cycle: 0.1% to 99.9%. **Includes:** test leads, protective rubber holster, one CR 2032 button battery and carrying case. ***One-Year Warranty.***

No. 355TE1110 (DM110).....**$29.99**

CAT II, 600V

Simpson

260 Series VOM Analog Multimeter

- Easy to operate with more than 35 measurement ranges
- Large, tri-colored dial with mirrored scale
- Reverse recessed safety jacks
- Self-shielding taut-band meter movement
- Audible continuity check (260-8Xi)
- Instant trend info for quick positive yes/no checks (260-8Xi)
- Self-contained AC current measurement up to 10 Amps (260-9S)
- Cat III, 600V (260-9S)

Includes: batteries, manual and full-size test leads with threaded probe tips and screw-on alligator clips or test lead set with retractable banana jacks. **(USA)**

No. 720ME068 (260-8 - Black) **$213.03**
No. 720TE260 (260-8Xi - Yellow) **$230.08**
No. 720TE397 (260-9S - Orange) **$331.50**

EXTECH INSTRUMENTS A FLIR COMPANY **400 Series**

Rugged Multimeters with built-in Non-Contact InfraRed Thermometer and True RMS functions

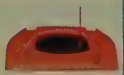
400 Series Multimeters

- Models EX450 and EX470 include built-in non-contact IR thermometer with laser pointer!
- Low current capability – measure down to 0.1µA
- Audible and visible input alerts
- Easy to read 1 inch digits on backlit display
- **Includes:** test leads, velcro strip for hanging, protective holster, bead wire temperature probe (except EX450) and 9V battery.

355TE470

Advantages of Non-contact InfraRed Thermometer with laser

Troubleshoot - Quickly locate hot spots
Distance - 8:1 target ratio allows for measurements in areas that are normally difficult or unsafe to reach
Speed - Point and shoot with final result in seconds
Convenience - No cables or probes to connect, break or lose.



Patented

Model	EX420	EX430	EX470
TT No.	355TE0420	355TE430	355TE470
Description	Autoranging	True RMS Autoranging	True RMS Autoranging IR Thermometer
Display	4000 Count Backlit	4000 Count Backlit	4000 Count Backlit
Basic Accuracy	±0.3% (VDC)	±0.3% (VDC)	±0.3% (VDC)
DC Voltage	0.1mV to 1000V	0.1mV to 1000V	0.1mV to 1000V
AC Voltage	0.1mV to 750V	0.1mV to 750V	0.1mV to 750V
DC Current	0.1µA to 20A	0.1µA to 20A	0.1µA to 20A
AC Current	0.1µA to 20A	0.1µA to 20A	0.1µA to 20A
Resistance	0.1Ω to 40MΩ	0.1Ω to 40MΩ	0.1Ω to 40MΩ
Capacitance	0.01nF to100µF	0.01nF to 100µF	0.01nF to 100µF
Frequency	0.001Hz to 10MHz	0.001Hz to 10MHz	0.001Hz to 10MHz
Temperature (Type K)	-4° to 1382°F (-20 to 750°C)	-4° to 1382°F (-20 to 750°C)	-4° to 1382°F (-20 to 750°C)
Temperature (IR with laser)	—	—	-58° to 518°F (270°C)
Diode/Continuity	Yes	—	—
CAT Rating	CAT III, 600V; CAT II, 1000V	CAT III, 600V	CAT III, 600V
Warranty	One-Year	Three-Year	Three-Year
PRICE	**$59.99**	**$79.99**	**$129.99**

AMPROBE

XR Series Digital Multimeters

Meters include a Magni-Grip™ Holster with magnetic hanging strap for hands-free operation, test leads, manual, spare fuse and 9V battery. Model 30XR-A is manual ranging with non-contact voltage tester. Model 34XR-A is a true RMS digital multimeter with temperature and backlight for contractors and field service technicians. 37XR-A offers high accuracy 0.1% performance combined with electronic test functions like Inductance, Capacitance, Frequency, Logic Test and dBm. 38XR-A with optical RS-232 PC interface for real time data acquisition using optional 38SW-A software, CAT IV 600V. Features and performance designed for industrial, automation, process and plant environments with Temperature, Capacitance, Frequency, Duty Cycle, dBm and 4-20 mA Loop Current Test.

374TE551

Model	30XR-A	34XR-A	37XR-A	38XR-A
TT No.	374TE8899	374TE9911	374TE552	374TE551
Meter Type	DMM	Autoranging DMM	Autoranging DMM	Autoranging DMM
Category	CAT II, 600V; CAT III, 300V	CAT III, 600V; CAT II,1000V	CAT III, 600V; CAT II,1000V	CAT III, 1000V; CAT IV, 600V
True RMS	No	Yes	Yes	Yes
AC/DC Volts	600V/600V	750V/1000V	750V/1000V	750V/1000V
AC/DC Current	10A/10A	10A/10A TRMS	10A/10A TRMS	10A/10A TRMS
Basic Accuracy	1.0%	0.50%	0.10%	0.25%
Resistance	20MΩ	40MΩ	40MΩ	100MΩ
Temperature	—	1832°F	—	2372°F
Inductance	—	—	40H	—
Capacitance	—	4,000µF	400µF	400µF
Frequency	—	40 MHz	10 MHz	10 MHz
Duty Cycle	—	0 to 90%	0 to 90%	0 to 90%
Continuity	Yes	Yes	Yes	Yes
Logic Test	—	—	TTL/CMOS	—
dBm	—	—	-13 to +50 dBm	-13 to +50 dBm
Loop Current %	—	—	—	4 to 20 mA
Backlight	No	Yes	Yes	Yes
Includes	Built-in non-contact voltage detector; leads	Type K thermocouple; alligator clips; leads	Alligator clips; leads	Type K thermocouple; alligator clips; leads; RS-232
Warranty	1-Year	3-Year	3-Year	3-Year
PRICE	**$62.95**	**$109.95**	**$135.95**	**$154.95**

No. 374TE3800 Optional software and RS-232 cable for 38XR-A **$24.95**

AMPROBE

Compact Meters with Magne-Grip™ Holster & NCV

VolTect™ Non-Contact Voltage Detector

Non-Contact Voltage (NCV) detection makes your testing safer and easier by letting you detect at voltages without probes. Exclusive Magne-Grip ™ holster frees both hands for your work. Each multimeter provides superior accuracy and features in a smaller form factor. **Includes:** Battery; Test probes; Magne-Grip ™ Holster; Temperature probe (35XP-A only).
One-Year Warranty.

Cat I, 1000V
Cat II, 600V
Cat III, 300V

Model	5XP-A	15XP-A	35XP-A
TT No.	374TE5511	374TE5512	374TE5514
Functions/Ranges	8 Functions/26 Ranges	8 Functions/27 Ranges	10 Functions/41 Ranges
Display	Manual Ranging, 2000 ct	Autoranging, 2000 ct	Autoranging, 4000 ct
DC VOLTS	200m, 2, 20, 200, 1000	200m, 2, 20, 200, 1000	400m, 4, 40, 400, 1000
AC VOLTS	200m, 2, 20, 200, 750		400m, 4, 40, 400, 750
DC AMPS	200u, 2m, 20m, 200m, 2 A		400, 4000u, 40, 400m, 2A
AC AMPS	200u, 2m, 20m, 200m, 2 A		400, 4000u, 40, 400m, 2A
Resistance	200, 2k, 20k, 200k, 2M, 20MΩ	200, 2k, 20k, 200k, 2M, 2000MΩ	400, 4k, 40k, 400k, 4M, 40MΩ
Continuity	Yes	Yes	Yes
Diode Test	Yes	Yes	Yes
Logic Test	—	TTL to 20 MHz	—
Capacitance	—	—	4n, 40n, 400n, 4u 40u, 4000 uF
Temperature	—	—	- 20 °C to 1000 °C, - 4 °F to 1832 °F
Frequency	—	—	4k, 40k, 400k, 4M, 1 MHz
PRICE	**$41.95**	**$62.95**	**$83.95**

FLUKE

330 Series Clamp Meters

- Smaller body and jaws fit into tighter spaces
- Improved low current measurements
- Fluke 335/336/337 measure Inrush Current
- One-handed Operation
- **Includes:** Case, leads & batteries

CAT III, 600V

Model	FLUKE-335A	FLUKE-336A	FLUKE-337A
TT No.	374TE0335A	374TE0336A	374TE0337A
AC Amps Range	0 - 600A	0 - 600A	0-999.9A
AC Amps Response	True-RMS	True-RMS	True-RMS
Inrush Current Measurement	—	Yes	Yes
DC Current	—	Yes	Yes
AC Voltage Range	0 - 600V	0 - 600V	0 - 600V
Jaws	1.2"	1.2"	1.2"
DC Voltage Range	0 - 600V	0 - 600V	0 - 600V
Ohms Range	0 - 600Ω 601 - 6000Ω	0 - 6000Ω 601 - 6000Ω	0 - 6000Ω 601 - 6000Ω
Continuity	≤ 30Ω	≤ 30	≤ 30Ω
Frequency	—	—	5-400 Hz
Back Light	Yes	Yes	Yes
Warranty	Three-Year	Three-Year	Three-Year
PRICE	$231.95	$317.95	$368.95
With Certificate of Calibration PRICE	FLUKE-335A-C 374TE0345 $380.35	FLUKE-336A-C 374TE03360 $396.35	FLUKE-337A-C 374TE3371 $416.55
Zippered Carrying Case	For 333. 334. 335. 336 and 337: 10-3/4"H x 4-3/4"W x 2"D 374TE0033 .....$23.13		

IDEAL

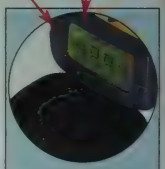
Industrial Clamp Meters

For measuring in 1000V AC/DC environments. Exclusive TightSight™ backlit display in clamp bottom provides easy reading in low-light areas.

CAT III, 1000V **CAT III, 600V**

Features:

- Voltage-presence warning on all functions
- Tapered jaws with hook tip
- True RMS
- Max/min
- Audible continuity
- Selectable auto power off
- Data hold
- Low battery indicator
- CAT III - 1000V rating



Patented backlit TightSight™ display for viewing in dark, bright or tight locations.

Includes: Leads, alligator clips and case.
Lifetime Warranty.
A. No. 462TE774 (61-774).....**$296.35**

Same as above except measures 660A AC/DC currents; CAT III - 600V rating. ***Lifetime Warranty.***
B. No. 462TE768 (61-768).....**$215.84**

EXTECH INSTRUMENTS A FLIR COMPANY

Clamp Meters

- Measures very low AC+DC Current
- High Resolution to 1mA
- Smaller clamps fit into tighter areas
- *One-Year Warranty*

ISO 9001

	Mini-Clamps			Full-Size Clamp
Model (New!)	380950	380947	380942	EX623
TT No.	355TE950	355TE947	355ME942	355TE623
Meter Type	High Resolution Mini	High Resolution Mini; True-RMS	High Resolution Mini; True-RMS	True-RMS w/IR thermometer and NCV
Rating	CAT III, 600V	CAT III, 300V	CAT III, 300V	CAT III, 600V
AC Amp Max Resolution	80A / 1mA	400A / 1mA	30A / 0.1mA	10mV
DC Amp Max Resolution	80A / 1mA	400A / 10mA	30A / 1mA	10mV
AC Volts	600V	–	400V	600V
DC Volts	600V	–	400V	600V
Jaws	0.5"	0.9"	0.9"	1.4"
Resistance	40M	–	–	40M
Frequency	10MHz	100kHz	–	40MHz
Display Range	4000 LCD	4000	4000	40,000
Other	Elongated Jaw; Data Hold;	Min/Max, Hold; Auto Zero;	Data Hold; Auto Zero	IR thermometer w/laser pointer 8:1 distance to target ratio
Battery and case included	Battery	Yes	Yes	Yes
Leads Included	Yes	No	Yes	Yes
PRICE	$129.99	$269.99	$359.99	$229.99
With Certificate of Calibration traceable to N.I.S.T with Data	355TE0950 $189.99	355PR094 $329.99	355ME042 $419.99	355TE0623 $289.99

EXTECH INSTRUMENTS A FLIR COMPANY New!

TK430 Electrical Test Kit

Handles all testing for installation and repair of electrical systems, HVAC equipment and large appliances. **Includes:** EX430 true RMS autoranging digital multimeter, MA200 400A clamp meter, 40130 non-contact voltage detector, set of CAT III-1000V test leads, Type K thermocouple bead probe, Type K to banana input adapter and storage case.
No. 355TE4443.....**$215.84**

FLUKE. Premium Cases

374AC0901 374AC025 374AC050 374TE550 374AC789 374AC2201 374TE1150 374AC125 374AC004

TT No.	Model	Description	Dimensions	Compatible with*:	PRICE
374AC0901	C90	Zippered, vinyl case with inside pocket and belt loop.	2-1/32" x 3-1/2" x 8"	All Fluke DMMs	$28.53
374AC025	C25	Zippered, vinyl case with inside pocket.	2-1/2" x 5" x 8-1/2"	8060A, 8062A, 21, 23, 27, 29, 50, 70, 110, 180 with a C70 holster	$29.80
374AC050	C50	Zippered, inside pocket belt loop and meter strap.	7-1/2" x 3-3/4" x 1-1/2"	114/115/116/117 DMMs, Most Thermometers	$28.68
374TE550	C550	Weather-resistant fabric, metal frame, inside and outside pockets, handle and shoulder strap holds meter and accessories.	13" x 20" x 9"	All Fluke DMMs	$74.54
374AC789	C789	Large, fabric, three compartments, removable handle and shoulder strap.	12" x 10" x 3"	702, 710, 740, 860 Series, 7-600 & 7-300, DSP-100, DSP-200	$97.72
374AC2201	C20	Heavy duty, carrying handle and accessories storage compartment. Top cover snaps onto back to serve as tilt stand.	10" x 6" x 4"	83, 87, 87-V, 89, 187/189 DMMs	$45.80
374TE1150	C115	Polyester case with two pockets.	9" x 7" x 2"	Fluke 20, 70, 11X, 170 Series	$22.83
374AC125	C125	Zippered, detachable external pouch.	10-1/2" x 6" x 2-1/2"	Fluke 120 Series Scopemeter	$32.00
374AC004	ToolPak	Includes a universal hanger, a magnet, and 9-inch (43 cm) and 17-inch (23 cm) "hook-and-loop" hanger straps.	15" x 6" x 1"	All Fluke DMMs except Models 12, 73, 83/85/87 III	$31.87

** "All Fluke DMMs" refer to the products shown in our catalog.*

FLUKE. Current Clamps For Oscilloscopes, Power Analyzers/Meters and DMMs

1 YEAR WARRANTY

A CAT III, 600V B CAT III, 600V C CAT III, 600V D CAT IV, 600V E CAT III, 600V

AC only Current Clamps					
Model	A. i200	B. i200s	C. i1000s	D. i400	E. i400s
TT No.	374AC465	374AC466	374TE000	374TE4440	374TE404
Current Range	AC: 1A to 200A	AC: 1A to 200A	AC: 0.2A to 1000A	AC: 1A to 400A	AC: 1A to 400A
Frequency Resp.	40 Hz to 10 kHz	40 Hz to 40 kHz	5 Hz to 100 kHz	5 kHz	5 Hz to 10 kHz
Output Level	1mA/A	10 mV/A, 100 mV/A	1 mV/A - 100 mV/A	1mA/A	10 Hz to 50 kHz
Max. Cond. Dia.	0.8"	0.8"	2.13"	1.18"	1.18"
PRICE	$116.96	$181.30	$432.89	$116.96	$210.53

F G CAT III, 300V H CAT III, 600V I CAT III, 600V J

Add a Zippered Vinyl case with your AC/DC Current Clamp

i410 with case No. 374TE0410 ..... $231.69
i1010 with case No. 374TE1010 ..... $324.41

	AC only Current Clamps		AC/DC Current Clamps		
Model	F. i800	G. i2000 Flex	H. 80i-110s	I. i410	J. i1010
TT. No.	374TE0860	374AC2001	374TE110	374AC410	374AC101
Current Range	AC: 100-800	AC: 2A to 2000A	AC: 0.1A to 70A DC: 0.1A to 100A	AC: 1A to 400A DC: 1A to 400A	AC: 1A to 600A DC: 1A to 1000A
Frequency Resp.	30 Hz to 10 kHz	1 Hz to 20 kHz	100 kHz	3 kHz	10 kHz
Output Level	1mA/A	10 mV/A, 1 mV/A	10 mV/A, 100 mV/A	1mV/A	1mV/A
Max. Cond. Dia.	2.13"	2.44"	0.46"	1.18"	1.18"
PRICE	$234.62	$285.22	$490.00	$187.15	$304.21

TL28A Alligator Clip Test Lead Set

Large jaws, long 63" leads and piercing probe. Solid, spring-loaded copper clips with a wide .50" (12.7mm) jaw opening and serrated teeth. Large piercing needle for penetrating larger gauge wires. 60" (1.5m), silicone-insulated leads, useable from –80°C to 150°C (-112°F to 302°F). Rated for 30V, 10A. One red, one black. **(USA)**

No. 374AC028 .....$37.07

TL75 Hardpoint Test Lead Set

Extremely hard alloy tips resist wear. Distinctive comfort grip probes. Economical PVC insulated leads. CAT. III, 1000V; 10A.

No. 374AC750 .....$17.37

TL76 Test Lead Set

Recommended for probing 4mm sockets (banana jacks), open terminals and printed circuit boards. One red and one black test lead 1.5m (59y) long. Right angle 4mm shrouded plug on end. Removable insulated IC caps are included for in probing such closely spaced leads as integrated circuits. Silicone insulated for superior flexibility in cold and resistance to heat. Conform to safety standard IEC 1010-2-031, CAT. III, 1000V. **(USA)**

No. 374TE0760 .....$24.34

TL910 Electronic Test Probes with Replacement Tips

- Small profile provides comfort and accessibility
- Comes with 5 sets of replaceable tips
- CAT. III, 1000V; 3A. **(USA)**

No. 374TE910 (TL910) $48.63

TL930 24" and TL932 36" Patch Cords

- 24" or 36" multi-stacking banana plug patch cords
- Banana plugs have nickel-plated finish
- 30V RMS, 60V DC, 15A. **(USA)**

No. 374TE930 24" .....$12.73/Pr.
No. 374TE932 36" .....$13.89/Pr.

TL935 Patch Cord Kit (3 Pair)

- 24", 36" and 48" multi-stacking banana plug patch cords
- Banana plugs have nickel-plated finish
- 30V RMS, 60V DC, 15A. **(USA)**

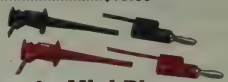
No. 374TE935 .....$34.69

TL940 Multi-Stacking Banana Plug to Mini-Hook

- Mini-Hooks attach to component leads up to 0.060" dia.
- 36" PVC insulated leads
- 30V RMS, 60V DC, 5A. **(USA)**

No. 374TE940 .....$18.53

TL950 Multi-Stacking Banana Plug to Mini-Pincer



- Mini-Pincers open to 0.090"
- 36" PVC insulated leads
- 30V RMS, 60V DC, 5A **(USA)**

No. 374TE950 .....$31.21

TL960 Multi-Stacking Banana Plug to Micro-Hook

- Micro-Hooks attach to component leads up to 0.040" dia.
- 36" PVC insulated leads
- 30V RMS, 60V DC, 3A **(USA)**

No. 374TE960 .....$23.13

TL970 Hook and Pincer Kit

- Handy all-in-one kit
- **Includes:** TL940, TL950, TL960 **(USA)**

No. 374TE970 .....$69.49

TP920 Test Probe Adapter Kit

- IC Test Tip Adapters, Extended Tips, Medium Alligator Clips fit over TL71 and TL75 test leads set
- IC Test Tip Adapter, 3A
- Extended Probe Tip, 3A
- Med. Alligator Clip, 5A
- CAT. II, 300V **(USA)**

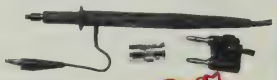
No. 374TE920 .....$30.10

80K-6 High Voltage Probes

- Extend the voltage measuring capability of an AC/DC Voltmeter to 6,000V
- 1V/1000V output when connected to 10- DMM
- Intended for low energy applications; DO NOT use to measure high voltages on power distribution systems
- Ground Clip included

No. 374TE806 (80K-6) $92.67

85RF High Frequency Probe



Best Seller

- Convert a DC voltmeter with an input impedance of 10 megohms into a high frequency RF voltmeter
- AC voltage inputs: 0.25 to 30V
- Frequency Range: 100 KHz to 500 MHz

No. 374AC0850 .....$185.39

Fluke SureGrip™ Accessories

AC220 Alligator Clips

- Insulated, nickel plated jaws grip objects to 3/8"
- Blunt tip grabs round screw heads. **(USA)**

No. 374TE2228 .....$28.94

TLK-220 US SureGrip™ Accessory Kit

Includes: AC220 plunger style alligator clips; AC285 large jaw alligator clips; TP220 sharp test probes; TL224 right to straight test leads; Moveable divider, vinyl carrying case w/zipper. Holds large DMMs. **(USA)**

Great Value

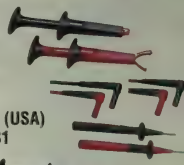
No. 374TE0202 ....$112.51

TL224 Silicone Insulated Test Leads

- 1.5M silicone insulated wire
- Superior strain relief. **(USA)**

No. 374TE224.....$21.97

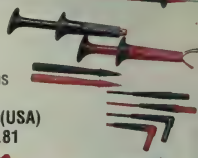
TL220 Industrial Test Lead Set



- Starter kit for Industrial applications
- Includes (1 pair): AC220, TP220, TL222 **(USA)**

No. 374TE2220 .....$56.81

TL223 Electrical Test Lead Set



- Starter kit for electrical applications
- Includes (1 pair): AC220, TP1, TL224.**(USA)**

No. 374TE0223 ....$56.81

TLK-225 Master Accessory Set

Best Seller

Includes: 2 each: AC220 Alligator Clips; AC280 Hook Clips; AC283 Pincer Clips; AC285 Alligator Clips; TP220 Insulated Test Probes; TL224 Silicone Insulated Test Leads and 6-Pocket Storage Pouch. CAT. III, 1000V; CAT. IV, 600V. **(USA)**

No. 374TE225 ....$112.51

FLUKE. Module

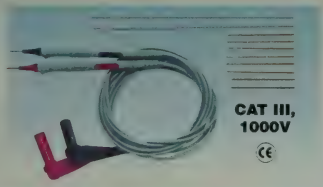
PV350 Pressure Module

- Converts your DMM into a Pressure/Vacuum Meter
- Measures HVAC/R hydrolic and pneumatic pressures to 500 psig and vacuums to 29.9" Hg

No. 374PR350 .....$349.31

Precision Electronic Test Probe Kit - 7 pc

Best Seller



This probe kit is ideal for making measurements not easily accessible. Features a right angle sheathed banana plug for connection to a hand held DMM. **Specs:** Operating temperature: 55° C; Operating voltage: 1000 VRMS; 3A. **Contains**: (1) red probe; (1) black probe; (5) sets of replacement tips. IEC 1010 compliant. **(USA)**

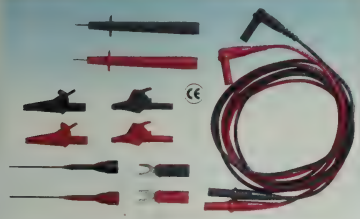
No. 458AC341 .....$34.63

Deluxe Multi-Use DMM Maxi-Kit

Best Seller

Kit contains two each (black/red): modular electronic test probes with replaceable tip and five sets of replacement tips, flexible test leads with straight and right angle DMM plugs, test lead couplers, electronic test probe leads with retractable tip, Minigrabber® leads, Minipincer® leads, medium alligator clips, extra large alligator clips, and slide-on IC tips. **Also included:** two spade lug adapters, and pouch. **(USA)**

No. 458TE5678 .....$112.15



Electrical DMM Test Lead Kit

CAT III, 1000V

Contains two each (black/red): modular electrical test probes with sharp stainless steel tip, flexible test leads with straight and right angle plugs, extra large alligator clips, medium alligator clips (300V, 5A), slide-on extended tips (300V, 3A), insulated spade lugs, & pouch. Conforms to IEC1010-2-031. **(USA)**

No. 458TE673 .....$52.99

Deluxe Electronic DMM Test Lead Kit

CAT III, 1000V

Kit contains two each (black/red): modular electronic test probes with .080" dia. tip, flexible test leads with straight and right angle DMM plugs, Maxigrabber® test clip with pincer tip, Minigrabber® Leads, Minipincer® Leads, medium alligator clips, slide-on extended tips (45 VAC) and slide-on IC tips (300V), & pouch. Conforms to IEC1010-2-031. 4' OAL. **(USA)**

No. 458TE674 .....$127.45

Basic Electronic DMM Test Lead Kit

Contains two each (black/red): test probes with silicone-insulated leads (banana plugs on meter end have no sleeve), slide-on extended tips & alligator clips. 4' OAL. **(USA)**

CAT III, 1000V

No. 458TE5672.....$25.45

DMM Probe Lead Sets

Contains: a set of two 48" long silicone insulated leads, one black and one red. Features stainless steel tip, excellent for penetrating oxidation or conformal coating.

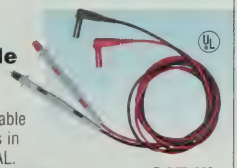
No. 458TE898 .....$13.45

Replacement Test Lead Sets

Each set contains two silicone insulated leads.

No. 458TE519 .....$13.05

Test Lead Kit with Replaceable Tips



Contains two each (black/red):replaceable tip test probe leads in silicone wire. 4' OAL.

Includes: five probe tip sets. **(USA)**

CAT III, 1000V

No. 458TE5676 .....$32.43

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.

We reserve the right to correct misprints.

DMM Test Probe to Multi-Stacking Banana Plug Kit

Contains: two each (black/red): test probes with silicone-insulated leads, alligator clips and slide-on extended tips.

No. 458TE5325 .....$25.45

DMM Replaceable Tip Test Probe Sets

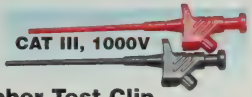
Quick-change chuck requires no tools to switch tips. Fits most DMMs by Fluke, Wavetek Meterman, Agilent, and others. Constructed with a thermoplastic elastomer outer coat, the probes have a comfortable grip and a flexible strain relief where the wire enters the probe. The tough polymer inner body provides strength and durability. Includes red and black probes with spring loaded pogo pin triple-point SMD Microtip (gold plated), and your choice of four plug types. **(USA)**

For DMMs with safety sheathed banana jacks:

Right-angle DMM plug

No. 458TE6469 .....$22.39

Do-It-Yourself Flexible Maxigrabber Test Clip



Test probes designed for your needs. These flexible shanks with turnable gripping claws are easy to use - just push to seize, and push to release. Accepts banana plug or bare lead. 6" long. **(USA)**

No. 758TE0022 Black $12.20

No. 758TE0024 Red $12.20

SMD Patch Cords

SMD Microtip Test Probe

Specially designed to probe SMD contacts. Flexible stainless steel needle point tip helps prevent damage to the SMD leads. 48" OAL.

No. 458TE1840 Black $12.64

No. 458TE1842 Red $12.64

SMD Grabber® Test Clip Patch Cord

Provides a temporary jumper wire between surface mount devices. 22AWG wire. Rating: 150 WVDC max.: .5A. 12" OAL.

No. 458TE342 Black $8.11

No. 458TE122 Red $8.11

SMD Test Tweezer

Test tweezer clip is specially designed for testing of surface mounted devices (SMDs). Rating: 30 VAC/70VDC VRMS; 3A. 48" OAL.

No. 458TE1843 Stacking Banana Plug $26.41

No. 458TE142 BNC Male.....$25.45

No. 458TW048 Right-Angle DMM Plug $25.45

Pomona Test Clips

Kelvin Clip Set

For accurate four wire measurements. Features two kelvin clips to four color-coded banana plugs. A minigator to banana plug lead is included for grounding or guarding. Rating: 45V, 5A. (France)

No. 458TE940 24" **$162.13**

Solderless Stackup Banana Plug

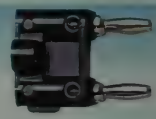
Rating: 5000VDC, 15A, +50°C (+122°F) max. **(USA)**

No. 458TE058 Black .....**$2.00/Ea.**
No. 458TE062 Red .....**$2.00/Ea.**
No. 458TE076 White .....**$2.00/Ea.**
No. 458TE066 Yellow .....**$1.95/Ea.**

Solderless Stackup Banana Plug w/Safety Shield

Rating: 5000VDC, 15A, +50°C (+122°F) max. **(USA)**

No. 458TE104 Black ....**$1.90/Ea.**
No. 458TE108 Red.....**$2.90/Ea.**



Double Banana Plug

Rating: 5000 VDC, 15A. Standard banana plug .210 dia., Banana jack .166 dia. **(USA)**

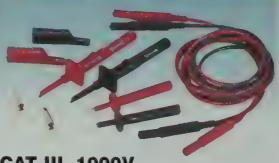
No. 458TE1380 Black **$2.54**
No. 458TE1384 Red **$2.54**

PROBE MASTER® DMM Probes & Leads

"Softie"™ Test Lead Kit - 10 pc

This soft flexible probe bends 90° or more to reduce wear and breakage of the lead. Gold tips and contacts. **Includes:** 48" long, 18 AWG, test leads with standard banana plug end. Red and Black. **(USA)**

Standard Banana Plug
No. 665TE069.....**$29.87**
Right Angle Male Safety Standard Banana Plug
No. 665TE8043.....**$29.87**



CAT III, 1000V

Universal DMM Probe Kit - 10 pc

Gold tips and connectors. **Includes:** (2) ea. (red and black), leads with shrouded right angle banana plug, probes, sprung hook probes, alligator clips, spade lugs and vinyl pouch. Rating: 1000V, 10A. **(USA)**

No. 665TE200.....**$40.86**

Deluxe DMM Lead Kit - 23 pc

Gold tips and contacts. **Includes:** (2) leads, (2) probes, (2) spade lugs, (2) alligator clips, (2) extender probes, (2) minigator leads, (2) sprung hook leads, (2) .025" wire wrap leads, (2) pico hooks, (2) pincer hooks, (2) sprung hook probes and pouch. Fits most Fluke, Tektronix, and Agilent meters. **(USA)**

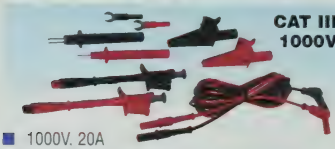
Best Seller

Right Angle Retractable Plug Kit
No. 665TE106 - 23 pc. **$86.08**
Straight Retractable Plug Kit
No. 665TE104.....**$86.08**

TECHNI-TOOL® DMM Probes & Leads

BIG SAVINGS on High Quality Techni-Tool® Brand Products!

Electrical DMM Kit - 10 pc



CAT III, 1000V

- 1000V. 20A
- Silicone lead wire, heavy-duty reinforced
- Insulated Alligator style rigid clips
- Straight to right angle sheath plugs
- ***One-Year Warranty.*** (France)

No. 758TE2621 .....**$52.35**

General Purpose DMM Kit w/Straight Plugs - 10 pc

- Reinforced silicone lead wire
- Straight to right angle 4mm sheathed plugs
- Insulated Alligator clips with piercing point
- Probe sprung hooks
- 6mm spade lug adapters
- ***One-Year Warranty.*** (France)

No. 758TE2695 .....**$39.85**

General Purpose DMM Kit w/Right Angle Plugs - 10 pc

- Reinforced silicone lead wire
- Straight to right angle 4mm sheathed plugs
- Insulated Alligator clips with piercing point
- Probe sprung hooks
- 6mm spade lug adapters
- ***One-Year Warranty.*** (France)

No. 758TE2696 .....**$39.85**

Deluxe SMD Slimline Probe Kit - 10 pc

- Miniflex clips and smaller MicroClips contact high-density IC leads
- Straight to right angle sheathed plugs
- Mini probes have spring-loaded tips
- Reinforced silicone lead wire
- ***One-Year Warranty.*** (France)

No. 758TE2970 .....**$73.95**

Deluxe Electronic DMM Kit - 11 pc

- Ideal for high-density circuit testing
- Mini probes have spring-loaded tips
- Mini clips with rotating tips
- Reinforced silicone lead wire
- Straight to right angle sheathed plugs
- ***One-Year Warranty.*** (France)

No. 758TE2622 .....**$78.50**

MicroClip Test Clip Kit - 30 pc

Best Seller

- 12 MicroClips test clips: (3 ea: Blue, Red, Yellow, Green)
- 12 10cm MicroLeads: (3 ea: Red, Yellow, Blue, Green)
- 6 holding rods
- ***One-Year Warranty.*** (France)

No. 758TE2848 .....**$193.35**

FOR PRECISION MINIATURE TEST PROBES SEE PAGE 97!

Pomona ELECTRONICS

Patch Cords

A. Micrograbber®

B. Micrograbber® Test Clip Kit

C. Minigrabber®

D. Minigrabber® Test Clip Kit

E. Miniature Stacking Banana Plug

F. Multi-Stacking Banana Plug

G. Alligator

JUST THE FACTS

Model	Type	OAL	To	OAL	Rating	Features	Amps	AWG	OAL	TT No. Red	TT No. Black	PRICE
5053	Micrograbber® (A) Banana Plug (F)	1.71"	Multi-Stacking	1.55"	150V	Connects test equipment to small circuit board components	3A	20	24"	458TE505	458TE053	$6.42
3782	Micrograbber® (A)	2.54"	Multi-Stacking Banana Plug (F)	1.55"	300V	Minigrabber output from a Banana jack	5A	20	12"	458TE560	458TE556	$5.19
									24"	458TE580	458TE576	$5.19
									36"	458TE600	458TE596	$5.40
									48"	458TE620	458TE616	$5.50
4613	Micrograbber® (A) Test Clip	1.71"	Micrograbber® (A) Test Clip	1.71"	150V	Hook attaches to components up to .040" O.D.	3A	20	12"	458TE1012	458TE1010	$6.42
									24"	458TE1016	458TE1014	$6.52
									48"	458TE1024	458TE1022	$6.72
4613	Micrograbber® (B) Test Clip Kit (10pc./1ea. Color)	1.71"	Micrograbber® (B) Test Clip	1.71"	150V	Hook attaches to components up to .040" O.D.	3A	20	24"	458TE5525 - Black, Brown Red, Orange, Yellow, Green, Blue, Violet, Gray, White		$61.15
4538	Minigrabber® (C)	2.54"	Multi-Stacking Banana Plug (F), Coiled Cord	1.55"	300V	Allows connections at various lengths, connects test equipment to terminals or wire wrap posts	5A	20	48"	458TE532	458TE530	$13.45
6244	Minigrabber® (C)	2.875"	Rt. Ang. Banana Plug	1.875"	300V	Sheathed Banana Plug	5A	18	48"	458TE2444	458TE4448	$8.56
6245	Minigrabber® (C)	2.875"	St. Banana Plug	2.75"	300V	Sheathed Banana Plug	5A	18	48"	458TE2454	458TE6245	$8.56
3784	Minigrabber® (C)	2.54"	Miniature Stacking Banana Plug (E)	.89"	300V	Minigrabber output from a miniature Banana jack	5A	18	24"	458TE690	458TE686	$5.40
3786-C	Minigrabber® (C) (1ea.; Black, Red)	2.56"	Multi-Stacking Double Banana Plug	1.55"	300V	Hands free testing in controlled voltage environment	5A	20	24"	458TE788		$16.62
									36"	458TE790		$15.80
									48"	458TE792		$18.04
6249	Minigrabber® (C)	2.54"	Multi-Stacking Banana Plug (F)	1.55"	300V	Interfaces directly into most a miniature Banana jack non-sheathed Banana jacks	5A	18	24"	458TE2490	458TE2494	$5.29
									12"	458TE2492	458TE2491	$5.19
									36"	458TE624	458TE6249	$5.40
3781	Minigrabber® (C) Test Clip	2.54"	Minigrabber® (C) Test Clip	2.54"	300V	Hook attaches to components up to .060" O.D.	5A	20	12"	458TE420	458TE416	$4.03
									18"	458TE440	458TE436	$4.03
5523	Minigrabber® (D) Test Clip Kit (10pc./1ea. Color)	2.54"	Minigrabber® (D) Test Clip	2.54"	300V	Hook attaches to components up to .060" O.D.	5A	20	18"	458TE523 - Black, Brown Red, Orange, Yellow, Green, Blue, Violet, Gray, White		$38.71
B	Multi-Stacking Banana Plug (F)	1.55"	Multi-Stacking Banana Plug (F)	.52"	5000VDC	Nickel plated finish	15A	18	12"	458TE1308	458TE212	$4.27
									18"	458TE182	458TE180	$4.38
									24"	458TE1326	458TE1324	$4.48
									36"	458TE1336	458TE1334	$4.48
									48"	458TE1356	458TE1354	$4.58
									72"	458TE722	458TE720	$4.78
AL-B	Alligator (G)	2.3"	Alligator (G)	2.3"	150V	Hands-free testing in controlled voltage environments	5A	18	24	458TE8242	458CN001	$4.99

Pomona® Test Clips

J. SMD Grabber

K. Minigrabber®

L. MiniGrabber® w/Banana Jack

M. Micrograbber®

N. Maxigrabber®

JUST THE FACTS

Model	Type of Clip	OAL	Max. Wire Dia.	Rating	Amps	Red TT No.	Black TT No.	PRICE
5243	SMD Grabber (J)	1.71"	0.090"	150V	0.5A	458TE5243	458TE525	$2.20
3925	Minigrabber® (K)	2.54"	0.090"	300V	5A	458TE818	458TE814	$1.65
4555	Minigrabber® (K)	2.54"	0.144"	300V	5A	458TE946	458TE942	$2.30
4723	Minigrabber® w/ Banana Jack (L)	2.54"	0.090"	300V	5A	458TE4723	458TE7230	$4.89
4233	Micrograbber® (M)	1.71"	0.10"	150V	3A	458TE872	458TE868	$2.55
5830	Maxigrabber® (N)	6.22"	–	250V	–	458AC302	458TE830	$8.97

Fluke Power Analyzers

CAT IV, 600V;
CAT III, 1000V

Fluke 435

Fluke 434

Pinpoint power problems faster, safer & in greater detail!

Model	435	434
TT No.	374TE435	374TE434
Inputs	4 voltage: 3-phase + N-GND, 4 current: 3-phase +N	
Measurements:		
Vrms, Arms, Hz, W, VAR, VA, PF, Cos (DPF), Crest Factors	Yes	Yes
Harmonics & THD (V, A, W), k-factor	Yes	Yes
Inter-harmonics	Yes	Yes
k-Wh & kVARh (fwd. & rvrse.), kVAh, demand interval selectable	Yes	Yes
Flicker (Pit, Pst, PG5)	Yes	Yes
Unbalance	Yes	Yes
Recorder/Auto Trend	Yes	Yes
Monitor on instrument – watches all PQ parameters	Yes	Yes
Real time scope/Phaser diagrams	Yes	Yes
Dips and swells/Half cycle based	Yes	Yes
Transient display	Yes	Yes
Inrush current	Yes	Yes
EN50160 compliance	Yes	Yes
Memory (screen/data sets)	50/10	50/10
FlukeView® software and interface cable	Yes	Yes
Integral Logging Function	Yes	Optional
PRICE	**$7,293.00**	**$5,212.00**
434/Log Logger Upgrade Kit - Adds logging function to 434	–	**374TE0434 $1,654.00**

FLUKE

Three-Phase Power Quality Analyzers

Features:

- Records all necessary values in a three phase system
- Minimal setup required with intuitive menus
- Automatic transient display
- Captures waveform data on all phases simultaneously
- Auto trend
- Seven hour operating time per charge on NiMH battery pack
- System-Monitor: Six power quality parameters on one dashboard

Fluke 430 Series handheld analyzers help you locate, predict, prevent and troubleshoot problems in power distribution systems. Simultaneously measures voltage and current on all three phases and neutral. The IEC standards for flicker and power quality are built-in and take the guesswork out of monitoring. Innovations like AutoTrend and System-Monitor automatically record events, even when running in the background. Excellent portability with up to 7 hours of rechargeable battery power. **Fluke-435 Includes:** Hard carrying case with rollers; 4 flexible (i430-flex) current probes; 5 test leads and clips; Battery charger; Flukeview® Software; Powerlog Software; Optical USB cable; Color localization set and manual. ***Three-Year Warranty.*** (Netherlands)

FLUKE

Three-Phase Power Logger

Ideal tool for 30-day NEC 220.87 compliant load studies. Sets up in seconds with included current probes. Full color display of wave forms and trends. Logs most electrical power parameters and harmonics, and captures voltage events.

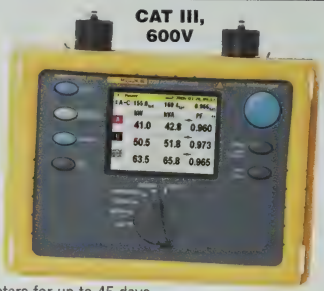
Features:

- Compact, rugged design; IP65 case
- Record power and associated parameters for up to 45 days
- Monitor maximum power demand over averaging periods you define
- Prove the benefit of efficiency improvements with energy consumption tests
- Measure harmonic distortion caused by electronic loads
- Improve reliability by capturing voltage dips & swells from load switching
- Measure all 3 phases and neutral with included 4 flexible current probes
- View graphs and generate reports with included Power Log software

Includes: 4 flexible current probes (15A/150A/3000A): Power Log software; Voltage leads and clips; Color localization set; PC interface cable; Universal AC adapter; Instruction manuals and carrying case. ***Two-Year Warranty.***

No. 374TE1735 .....**$2,772.00**

CAT III, 600V



New!

FLUKE

1A/10A Current Clamp Set

Set of 3 precision dual range current clamps for secondary current transformer applications. For 1735 and 1740 Series Power Quality Loggers.

No. 374TE4413 .....**$495.00**

FLUKE **Power Quality Analyzer**

Model	FLUKE 43B
TT No.	374TE004
Meter Type	Power Quality Analyzer
True RMS Range V	5V to 1250V
Input Bandwidth: (1)Voltage (2)Current	(1) Channel 1 20 MHz (2) Channel 2 15 KHz
Crest Factor (±4%)	1.0 to 10.0
Power Factor (±0.02)	0.00 to 1.00
Phase Measurement Range	-179° to 180°
K-Factor	1.0-30.0
Waveform Memory	20 Screens
RS-232 Interface	Yes optically isolated
Warranty	Three-Years
Includes	Hard Case; Voltage and Current Probes; FlukeView® Software; Interface Cable and Line Voltage Adapter/Battery Charger.
PRICE	$2,694.38
With Calibration PRICE	374TE0433 $2,838.58

Fluke 43B

CAT III, 600V CE

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.

We reserve the right to correct misprints.

FLUKE. Insulation Testers

Fluke 1503 and 1507

Compact, rugged, reliable and easy-to-use. Multiple test voltages multimeters are ideal for many troubleshooting, commissioning and preventative maintenance applications.

Features:

- Insulation test: 1503: 0.1mΩ to 2000mΩ
  1507: 0.01mΩ to 10GΩ
- Multiple Test voltages: 1503: 500V, 1000V
  1507: 50V, 100V, 250V, 500V, 1000V
- Live circuit detection prevents insulation test if voltage >30V is detected for added user protection
- Automatic calculation of polarization index and dielectric absorption ratio
- Auto-discharge of capacitive voltage
- Resistance: 0.01Ω to 20.00kΩ
- Compare function makes repetitive tests simple and easy (1507 only)
- Remote test probe makes hard-to-reach testing easier (1507 only)
- AC/DC voltage: 0.1V to 600V
- 200 mA continuity
- Auto power off

Includes: Remote probe (1507 only), test leads and probes, alligator clips, holster. ***One-Year Warranty.***

Fluke 1503 (Not Shown)
No. 374TE1503 .....**$342.95**

Fluke 1507 (Shown)
A. No. 374TE1507 .....**$453.95**

FLUKE 1507 **FLUKE 1587**

Fluke 1503 and 1507

A digital insulation tester combined with a full-featured digital multimeter in a single, compact, handheld unit providing maximum versatility for both troubleshooting and preventative maintenance. Whether you work on motors, generators, cables, or switchgear, these easy-to-use multimeters are ideally suited to help you with your tasks.

Features:

- Large display with backlight
- Insulation test: 1587: 0.01 MΩ to 2GΩ
  1577: 0.1 MΩ to 600 MΩ
- Multiple test voltages:
  1587: 50V, 100V, 250V, 500V, 1000V
  1577: 500V, 1000V
- Auto-discharge of captive voltage
- Live circuit detection prevents insulation test if voltage >30V is detected for added user protection
- AC/DC voltage, DC mV, AC/DC mA, Resistance (Ω), Continuity
- Capacitance, diode test, temperature, min/max, frequency (Hz) (1587 only)

CAT III, 1000V;
CAT IV, 600V

- Auto power off

Includes: Remote probe, test leads and probes, alligator clips, K-type thermocouple (1587 only), hard case. Accepts Fluke TPAK magnetic hanging kit. ***Three-Year Warranty.*** **(USA)**

Fluke 1577 (Not Shown)
No. 374TE1577 .....**$502.95**

Fluke 1587 (Shown)
No. 374TE1587 .....**$621.95**

FLUKE. *Digital insulation testing from 250 to 5000 Volts!*

CAT III, 600V

1550B 5kV MegOhmmeter

- Programmable test voltages in 50-volt steps from 250 to 1000V, and 100-volt steps from 1000 to 5000V
- Automatic calculation of Dielectric Absorption and Polarization Index tests
- 99 memory locations store all measurement parameters

Test the insulation resistance of new electrical equipment during installation or old equipment as preventative maintenance. **Features:** Measures up to 1 Tera-ohm; warning voltage function alerts you voltage is present and gives a reading up to 1000V AC or DC; cable capacitance; leakage current; ramp function (0-5000V DC). **Includes:** Test leads, 5000V-rated probes; Alligator clips; PC software; Interface adapter and cable; Line cord; Soft carrying case with waterproof base; User´s manual. ***Two-Year Warranty.***
No. 374TE1550 .....**$3,432.95**

FLUKE.

1630 Earth Ground Clamp Meter

New!

Simplifies ground loop testing and measures non-intrusive leakage current. Compact, rugged design makes it easy to fit into tight places. Complete earth ground loop and continuity testing without breaking the circuit. Operates on 9V alkaline battery. **Includes:** Resistance test loop; carrying case with strap; multi-language users manual.

- Wide ground loop resistance range from 0.025Ω to 1500Ω
- Large jaw opening of 1-3/8" for tests on ground conductors and/or equipotential bus bars
- Measurement of ground leakage current from 0.2mA to 1000mA
- Wide ac current measurement range from 0.2A to 30A
- Continuity loop test with audible alarm
- User-defined Hi/Lo alarm limits
- Display Hold captures reading in hard-to-reach places
- Records and stores measured values
- Automatically self-calibrates

No. 374TE1630 .....**$1,408.95**

Specialty Stopwatch/Clock

EXTECH

This digital LCD stopwatch has plus calendar and alarm and is water resistant. The timing capacity is 23hrs, 59mins & 59.99secs. Includes a 39" (1m) lanyard and LR44 battery. ***One-Year Warranty.***
No. 355ME365 .....**$19.99**
Calibrated Stopwatch
No. 355TE5510 .....**$69.99**

Big Digital Countdown

This digital countdown timer has a time capacity of 99.99 Minutes. Features one channel with an alarm. Display Size: 1.9" X 0.83". Digital Height: 0.5". **Includes:** (1) AA Battery; magnet; stand and clip.
No. 780TE170 .....**$21.65**

4-Channel Timer with Clock

This digital countup/countdown timer has a timing capacity of 99hrs, 59mins & 59sec. It features four channels, alarm and has a display size of 1.88" X 0.88", and a digital height of 0.63". **Includes:** (1) LR44 battery, magnets stand and clip.
No. 780TE388 .....**$29.95**

FLUKE.

Safer than traditional solenoid testers and NFPA 70E compliant (per Article 110.9)

T+Pro Electrical Tester

Three forms of voltage detection - light, sound, vibration - to work more efficiently in noisy environments, dimly lit areas, or tight work spaces. Built-in flashlight, GFIC-trip capability. Extra heavy-duty, replaceable test leads. Continuity beeper. ***Two-Year Warranty.***

No. 374TE4107.....$88.95

CAT IV, 600V
CAT III, 1000V

FLUKE.

Fluke T5 Tester

Your Fluke T5 Electrical Testers let you check voltage, continuity and current with one compact tool. All you do is select volts, ohms, or current and the tester does the rest. **Features:** measures volts AC and volts DC, displays resistance to 1000Ω, OpenJaw™ current measurement up to 100A, detachable Slim-Reach™ probe tips, and a continuity beeper. The T5 is available in 600V and 1000V models. ***Two-Year Warranty.***

T5-600: Cat III 600V
No. 374TE600.....$104.95

T5-1000: Cat III 1000V, Cat IV 600V
No. 374TE1000.....$130.95

1000V

IDEAL

Automatic Circuit Identifiers

Features:

- Audible and visual indications
- Verifies presence of power
- Digital receiver
- Non-contact voltage sensor for 80-300VAC
- Includes GFIC receptacle tester
- Verifies wiring configurations
- Low battery indicator

No. 462TE1534 .....$70.13

IDEAL

Voltage Tester Combo Case™

Includes Circuit Identifier; Vol-Con® XL Voltage/Continuity Tester features audible continuity and voltage indicators and tests from 6-600V AC/DC; Volt-Sensor® NCV Tester has an over-molded cushion grip. Rugged hard case with large storage compartments.

No. 462TE2000 .....$100.11

CAT III, 600V

IDEAL

Circuit/Receptacle Testers

Tests for correct wiring on standard 3-wire and RFI receptacles. Use on 125VAC circuits. ***Five-Year Warranty.***

No. 462TE051 .....$38.25

462TE958

462TE956

IDEAL

SureTest™ Circuit Tracer Kit

Trace underground cables buried up to 15 feet.

Features:

- 0-99 numeric value and audible signal provide quick and easy-to-understand tracing feedback
- Identifies breakers and fuses
- Pinpoints opens and shorts
- Traces wires behind walls and underground
- Can be used on circuits 0-600V AC/DC

Includes: Transmitter, Receiver, Tracer Test Lead Set, Inductive Clamp (61-958 only), Battery Pack (61-958 only), Hard Carrying Case, AA Batteries, Instruction Manual.

Model 61-958
No. 462TE958 .....$1,118.83
Model 61-956
No. 462TE956 .....$718.80

EXTECH INSTRUMENTS
A FLIR COMPANY

3-in-1 Tester!

Circuit Breaker Finder, Circuit Tester, and GFCI Receptacle Tester

New!

Locates circuit breakers and tests receptacle wiring.

- Quickly locate 110V to 125VAC Circuit Breakers and Fuses
- Variable Sensitivity adjustment to pinpoint correct circuit breaker
- LED's indicates if receptacle is correctly wired
- Audible and visual circuit breaker indication
- Transmitter and Receiver snap together for easy storage

GFCI Transmitter

- Tests GFCI circuits
- LED indication of 2 test conditions and 5 wiring faults
- Tests Reversed/Open Connections
- Lights indicate circuit condition
- ***One-Year Warranty***

No. 355TE1012 .....$39.99

EXTECH INSTRUMENTS
A FLIR COMPANY

LCD Multifunction Voltage Tester

New!

Multifunction voltage continuity electrical tester with flashlight. Easy to read LCD display clearly shows test results.

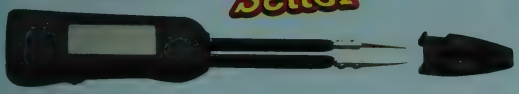
Features:

- Large backlit LCD display
- AC Voltage fvrom 0 to 480V, DC Voltage fvrom 0 to 690V
- Polarity detection with LEDs for positive and negative DC
- Continuity Test with audible tone
- Two handed operation for low impedance testing
- Built-in flashlight for testing in tight areas
- Rubberized double-molded IP64 housing
- IEC1010-1 CAT IV 600V and CAT III 1000V safety rating
- Dimensions: 9.4x3x1.6", (240x78x40mm)
- Weight: 8.4oz (237g)
- Includes 2 AAA batteries
- ***One-Year Warranty***

No. 355TE3303.....$59.99

EXCELTA CORPORATION

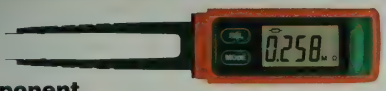
Best Seller



IntelliTweezer™

Quickly evaluate all types of SMD components with just one hand. R-L-C meter in a tweezer. Automatically measures inductance, capacitance, resistance, voltage and continuity/open test. Shows polarity of diodes and identifies shorting. Measures DC Voltage 100uV to 800mV. Represents AC Voltage with picture similar to an oscilloscope. Holds readings indefinitely. Replaceable tips, tip cap and pocket holder. ***One-Year Warranty.*** (Canada)
No. 352TW220 .....**$415.00**

EXTECH INSTRUMENTS A FLIR COMPANY



Passive Component R/C SMD Tweezer Meter

For fast, precise measurement of surface mount components. **Features:** 4000 count LCD; Measures resistance, capacitance and diode test; Relative mode for zero or user supplied reference; Overrange and low battery indicators; auto power off; **Includes:** 2 AG13 batteries. ***1-Year Warranty.***
No. 355TW1005 (EA15).....**$49.99**

IDEAL

Voltage Performance Monitor

Simply plug into outlet and unit captures and logs voltage events. Easy-to-navigate setup via menu of pre-set standards.

- Real-time TRMs voltage, frequency and harmonics monitoring
- Logs voltage, sags, swells and impulses
- Saves up to 512 events
- CAT III 300V
- Measures %THD and logs periods over 3% (line to neutral)

Includes: Four international plug adapters, carrying case & quick reference guide.
No. 462TE830 .....**$489.25**

FLUKE. *Easy-to-use!*

VoltAlert™ Non-Contact AC Voltage Detector

CAT IV, 1000V

Touch the tip to a terminal strip, outlet or cord. When the tip glows red, and the unit beeps, you know there's voltage in the line. Electricians, maintenance, service, safety personnel can quickly test for energized circuits and defective grounds on the factory floor or in the shop. Continually tests its battery and its circuit integrity with a periodic double flash visual indication using Fluke Voltbeat™ technology. ***Two-Year Warranty.***

Detects line voltage from 90VAC – 1000VAC
No. 374TE1011 (1AC-AI-II) **$25.25**

Detects control voltage from 20VAC – 90VAC
No. 374TE1013 (1LAC-A-II) ..**$25.25**

MENDA

Circuitracer® Continuity Tester

Bright light confirms electrical circuit continuity. The low voltage lamp tests unpowered circuitry. Alligator clip at other end. **Specs:** Range: 0-600V or 0-10. Probe: 3V at 270 ma maximum. **Includes:** 2 AAA batteries. **(USA)**
No. 548ST130 .....**$17.20**

Circuitracer® Continuity Tester w/Audible Alarm (50Ω)
No. 548TE5135 .....**$44.35**

Circuitracer® Voltage and Continuity Tester
No. 548ST351 .....**$26.85**

EXTECH INSTRUMENTS A FLIR COMPANY

New!

Remote & Local Continuity Tester

One person operation for wire and cable testing.

Features:

- Local continuity checking accomplished by a bright flashing LED and loud pulsating beeper
- Remote continuity with remote probe that eliminates need for two technicians
- Flashing remote probe. 2-lead, bi-color LED probe allows one person to identify up to 3 wires or cables at a time
- Polarity verification - drives a 20 mA DC current pulse through wires or cables under test to the bi-color remote probe enabling the technician to identify each wire under test and eliminate false high impedance readings
- Lightweight/Pocketsize - clips on and hang from cables
- ***One-Year Warranty***

No. 355TE0022.....**$29.99**

Mag-Probe®

Non-Contact Test Probe

Used for troubleshooting solenoid operated devices, stepper switches, relays, or any device with a magnetic electro-mechanical connection. Use on AC or DC. Explosion Proof. 3-1/2" long. Wt.: 1 oz. **(USA)**

Standard model, for standard-sized and larger devices.
No. 177TE001 .....**$34.50**

Water PROOF

High sensitivity model, for all solenoids, relays, and reed relays.
No. 177TE002 .....**$40.50**

TECHNI-TOOL

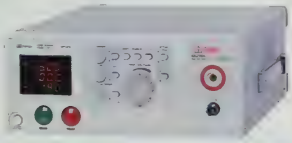
Choice of OSHA

CAT IV Rated!

Non-Contact AC Sensor

Outstanding safety instrument locates defective ground, energized circuits and induced voltage. No contact with conductor wire required. Senses voltage through insulation. Probe glows cherry red in presence of AC voltage. Detects 50 to 1000 Volts AC. Alkaline batteries included. ***Lifetime Guarantee.*** **(USA)**
No. 758TE0001 .....**$19.95**
With Audio Alert (will not beep when it comes in contact with a static field!)
No. 758TE0002 .....**$21.95**

GW INSTEK



Electrical Safety Tester

- 500VAC output
- Arc detection
- Zero crossing turn-on
- 3 ranges of adjustable cut-off current
- Digital display for voltage, current and timer at same time
- Automatic Fail indicator of alarm lamp and buzzer
- General input power acceptable
- True rms current read-back
- 9-pin PLC control for start, stop and test result output
- Voltage output adjustable during test period

TT No.	471TE815	471TE825
AC W Test Output Voltage	0.1-5kV	0.1-5kV
ACW Test Trip Current mA	0.3-100mA	0.3-100mA
DCW Output Voltage	0.1-5kV	–
DCW Trip Current mA	0.3-10mA	–
IR Test Output Voltage	–	DC500V/1000V
IR Test V Regulation	-	1-2000MΩ
Test Time (sec/continual)	1-180	1-180
Arc Detection	0.3-100mA	0.3-100mA
Digital Display	V.A. Time	V.A. Time
Remote Control	Yes	Yes
Display	3-1/2 digits 0.39" LED	3-1/2 digits 0.39" LED
Output	500VA	500VA
PRICE	**$860.00**	**$825.00**

Fluke Thermal Imagers

FLUKE. *The versatile choice for maintenance and production engineers and technicians!*

Ti4X IR FlexCam® Thermal Imagers

Everything needed for virtually every thermography task. With a 160 x 120 detector and a temperature sensitivity to 0.08°C (NETD), they deliver high resolution images where even the smallest temperature differences can be seen. Units use an easy Windows® CE menu structure and offer an extended troubleshooting feature set to allow on-the-spot analysis in the field. ***Typical Applications include:*** *Predictive maintenance; Industrial maintenance; Quality control; Process monitoring.*

Ti5X IR FlexCam® Thermal Imagers

Featuring 320 x 240 detectors with industry-leading thermal sensitivity (0.05°C NETD) for high resolution, ultra-high-quality results. In addition the 60 Hz acquisition rate detector displays temperatures live on a large 5 inch color display. ***Typical Applications Include:*** *Predictive maintenance; Power/utilities; Process monitoring; Research and development; Electronic design.*

Includes: Heavy duty carrying case; 2 rechargeable battery packs; Battery charger; AC adapter (for Ti55 model only); Video cable; 512 MB compact flash card; Compact flash card reader and USB cable; PCMCIA compact flash card reader; Neck strap; SmartView reporting and analysis software on CD; User manual on CD; Calibration certificate. ***Two-Year Warranty.***

Common Features:

- 180° articulating flexible lens to view images in every situation
- Three lens options are available to cover many applications
- Large 5" high contrast color LCD
- Fully radiometric for detailed temperature analysis and tracking
- SmartFocus for best image quality and accurate temp measurement
- Personalized instrument set-up for multiple use
- CompactFlash memory cards to store 1000 IR images plus fully radiometric temperature data
- SmartView reporting and analysis software included
- Optional telephoto (54mm) and wide angle (10.5mm) lenses are available for most Flexcam models. Ask your sales representative for more information

Feature	Ti40FT (with IR Fusion)	Ti45FT (with IR Fusion)	Ti50FT (with IR Fusion)	Ti55FT (with IR Fusion)
Temperature range to cover broad industrial applications	-20 to 350°C (-4 to 662°F)	-20 to 600°C (-20 to 1112°F)	-20 to 350°C (-4 to 662°F)	-20 to 600°C (-20 to 1112°F)
High temperature option	1200°C (2192°F)	1200°C (2192°F)	1200°C (2192°F)	1200°C (2192°F)
High thermal sensitivity for viewing even the smallest temperature differences (NETD)	0.09°C (90mK)	0.08°C (80mK)	0.07°C (70mK)	0.05°C (50mK)
AutoCapture for making intermittent problems visible		X		X
On-board analysis functions		X		X
User-defined text annotations for simplified reporting		X		X
Built-in visible light (digital) camera	X	X	X	X
IR-Fusion blending thermal and visible light images to easily pinpoint suspect components	Picture-in Picture only	X	X	X
IR/Visible Alarm function		X		X
Laser pointer for easy targeting	X	X	X	X
Flash and torch light quality image in dark environments	X	X	X	X
Fluke Model	**FLK-TI40FT-20**	**FLK-TI45FT-20**	**FLK-TI50FT-20**	**FLK-TI55FT-20**
TT No.	**374TE4021**	**374TE4521**	**374TE5022**	**374TE5520**
PRICE	**$13,990.00**	**$18,490.00**	**$22,990.00**	**$26,490.00**

FLUKE. **Ti10 and Ti25 Thermal Imagers**

New!

Save time and prevent problems using thermal imaging technology. Works in ambient temperatures as low as -10°C (14°F) and high as +50°C (122°F), and the Ti25 measures up to 350°C (662°F). **Includes:** SmartView™ analysis and reporting software; 2 GB SD memory card; SD card reader for downloading images into your PC; Rugged hard carrying case and portable soft carrying case; Rechargeable internal battery; AC charger/power supply; Printed users manual. ***Features:*** Easy-to-use - single handed operation, intuitive 3-button menu (Ti25), Supports 16 languages, Adjustable hand strap (Ti25), Easy identification and reporting of problems with IR-Fusion® Technology both in camera and software combines visual image with IR image in full screen or picture-in-picture (Ti25) views, Microphone and playback for voice annotation (Ti25), Rugged and reliable, Thermal sensitivity shows even small temperature differences, Large, high-quality display - 640 x 480, 3.6" diagonal color LCD display (Ti25), Multiple viewing modes, SmartView™ analysis and reporting software, Easy storage and transfer of more than 1200 IR Fusion thermal and visible images using removable 2GB SD memory card. ***Two-Year Warranty.***

Imaging Performance		
Model	**Ti10**	**Ti25 (Shown)**
TT No.	**374TE1100**	**374TE1125**
Thermal field of view	23° horizontal x 17° vertical	23° horizontal x 17° vertical
Minimum focus distance	Thermal lens: 15 cm (6"). Visible light lens: 46cm (18")	Thermal lens: 15 cm (6"). Visible light lens: 46cm (18")
Thermal sensitivity (NETD)	0.2° at 30°C (200 mK)	0.1°C at 30°C (100 mK)
Minimum span(auto/manual)	10°C/5°C	5°C/2.5°C
Focus	Manual	Manual
Detector size	160 x 120	160 x 120
Visual camera	640 x 480 pixels, full color	640 x 480 pixels, full color
Temperature range	-20°C to 250°C (-4°F to +482°F)	-20°C to +350°C (-4°F to +662°F), 2 ranges
Accuracy	±5°C or 5% whichever is greater	±2°C or 2% whichever if greater
Measurement modes	Center point	Center point and hot and cold markers
On-screen emissivity correction	No	Yes
Set-up controls	Date/time, °C/°F, language	Date/time, °C/°F, language, hot & cold spot image
Power	Internal rechargeable battery, 3-4 hours continuous operation or AC adapter, 110/230 VAC	
PRICE	**$4,495.00**	**$7,495.00**

FLUKE.

Fluke 500 Series Infrared & Contact Thermometers

Fluke 500 series digital laser thermometers make even complex measurements easy. Quickly navigate advanced features to adjust emissivity, start data logging, or turn on and off alarms. With a rugged, easy-to-use, ergonomic design, these two-in-one contact and non contact thermometers can stand up to tough industrial, electrical, and mechanical environments. **All Include:** Batteries; Hard carrying case or holster; Operators Guide. ***Two-Year Warranty.***

JUST THE FACTS			New!
Model	**A. Fluke 561**	**B. Fluke 566**	**C. Fluke 568**
TT No.	**374TE561**	**374TE566**	**374TE568**
Temperature Range	-40°F to 1022°F (-40°C to 560°C)	-40°F to 1202°F (-40°C to 650°C)	-40°F to 1472°F (-40°C to 800°C)
Distance to Spot Ratio	112:1	30:1	50:1
Accuracy	±1% of reading or ±1%°C (±2°F), whichever is greater; below 0°C/32°F, ±1%°C (±2°F), g±0.1°/1°	< 0°C (32°F): ±(1.0°C (2.0°F) +0.1°/1°C or °F); >0°C (32°F): ±1% or ±1.0°C (±2.0°F), whichever is greater	< 0°C (32°F): ±(1.0°C (2.0°F) +0.1°/1°C or °F); >0°C (32°F): ±1% or ±1.0°C (±2.0°F), whichever is greater
Resolution	0.1°C (0.1°F)	0.1°C (0.1°F)	0.1°C (0.1°F)
Emissivity	Adjustable	Adjustable	Adjustable
Min/Max/Avg.	MIN/MAX/DIF	MAX, MIN, AVG	MAX, MIN, AVG
Datalogging	No	Yes	Yes
Hi/Lo Alarm	No	Audible & two-color visual	Audible & two-color visual
Batteries	2 AA Batteries	2 AA Batteries	2 AA batteries & USB when used with a PC
PRICE	**$161.00**	**$379.00**	**$499.99**

60 Series Handheld Infrared Thermometers

Reach for Fluke 60 series IR thermometerd for jobs requiring temperature measurement in hard-to-reach, or dangerous situations Get accurate readings over a broad range of temperatures -40°C to 760°C (-40 °F to 1400 °F). Plus, the enhanced optics allow you to measure smaller objects further away. **All Include:** Batteries; Hard carrying case or holster; Operators Guide. ***Two-Year Warranty.***

JUST THE FACTS			
Model	**D. Fluke 62**	**E. Fluke 63**	**F. Fluke 68**
TT No.	**374TE062**	**374TE0063**	**374TE0068**
Temperature Range	-20F° to 932°F (-30C° to 500°C)	-25°F to 999°F (-32°C to 535°C)	-25°F to 1400°F (-32°C to 760°C)
Distance to Spot Ratio	10:1	12:1	50:1
Accuracy	10°C to 30°C (50°F to 86°F): ±1°C (2°F) Outside 10°C to 30°C (50°F to 86°F): ±1.5°C (3°F) or ±1.5% of reading, whichever is greater	±2°C (±3°F) for targets -18°C (0°F) to 23°C (73°F); ±1% of reading or ±1°C (±2°F) whichever is greater, for targets 23°C (73°F) to 510°C (950°F) Above 510°C: 1.5% of reading	±2°C (±3°F) for targets -18°C (0°F) to 23°C (73°F); ±1% of reading or ±1°C (±2°F) whichever is greater, for targets above 23°C (73°F)
Resolution	0.2°C (0.5°F)	0.2°C (0.5°F)	0.1°C (0.1°F)
Emissivity	Pre-set to 0.95	Pre-set to 0.95	Adjustable
Min/Max/Avg.	MAX	MAX	MAX, MIN, AVG
Datalogging	No	No	Yes
Hi/Lo Alarm	No	No	Yes
Batteries	9V (included)	9V (included)	9V & AC Adapter (included)
PRICE	**$99.50**	**$247.00**	**$581.00**

Fluke-68 Calibrated No. 374TE0069 .....**$632.00** **Fluke-68IS Intrinsically Safe No. 374TE0067** **$833.00**

FLUKE.

50 Series II Thermometers

Fluke's rugged 50 Series II thermometers offer high accuracy with fast response times to quickly capture your measurement and show you trends. Choose from our "Just the Facts Chart" to get the functionality, thermocouple support and data logging you need. **(USA)**

Model	A. 54 Series II	B. 53 Series II	C. 52 Series II	51 Series II
TT No.	**374TE542**	**374TE532**	**374TE522**	**374TE512**
Thermocouple Types	K, J, T, E, R, S, N	K, J, T, E, R, S, N	K, J, T, E	K, J, T, E
Number of Inputs	Dual	Single	Dual	Single
Time Stamp	Time of Day	Time of Day	Relative Time	Relative Time
Splash /Dust Resistant	X	X	X	X
Dual Display w/Backlight	X	X	X	X
MIN/MAX/AVG Record	X	X	X	X
Compatible w/ Toolpak™	X	X	X	X
(T1-T2) Readout	X		X	
Logging up to 500 points	X	X		
IR Port for Download to PC	X	X		
Measurement Range	-418°F to 2501°F	-418°F to 2501°F	-418°F to 2501°F	-418°F to 2501°F
Display Resolution	0.1°C/F/K < 1000° 1°C/F/K ≥ 1000°	0.1°C/F/K < 1000° 1°C/F/K ≥ 1000°	0.1°C/F/K < 1000° 1°C/F/K ≥ 1000°	0.1°C/F/K < 1000° 1°C/F/K ≥ 1000°
Warranty	Three-Year	Three-Year	Three-Year	Three-Year
PRICE	**$364.00**	**$313.00**	**$268.00**	**$222.00**
With Certificate of Calibration	**374TE5421**	**374TE0520**	**374TE052**	**374TE513**
PRICE	**$414.00**	**$363.00**	**$318.00**	**$272.00**

FlukeView® Forms Software with Cable No. 374ME285 (FVF-SC1) **$179.93**

FLUKE Contact Probes

TT No.	Model No.	Type	Measure Range	Other	PRICE
A. 374AC0081	80PK-1	Bead Probe	-40°C to 260°C -40°F to 500°F	Not suitable for liquid immersion	$23.33
B. 374TE8022	80PK-22	Immersion Probe	-40°C to 1090°C -40°F to 1994°F	Compatible with K-type temp. measuring instruments	$70.14
C. 374AC813	80PK-3A	Surface Probe, Convex Surface	0°C to 260°C 32°F to 500°F	K-type probe is ideal for hot rollers and plates	$116.96
F. 374TE8026	80PK-26	Tapered Probe (Can not be exposed to halides or sulfide)	-40°C to 816°C -40°F to 1500°F	Surface probe, air and non-corrosive gases	$87.67
G. 374TE8027	80PK-27	Industrial Surface Environment Probe	-127°C to 600°C -196°F to 1112°F	For flat or slightly curved surfaces	$232.86
I. 374TE081	80PK-EXT	Type K Extension Wire Kit	Maximum continuous exposure temp.: 260°C (500°F)	For extending and repairing J, K or T-type thermocouple wires. **Kit Includes:** 9' of thermocouple wire and 1 pair of male/female mini-connectors	$38.63
J. 374TE0080	80TK	Thermocouple Module	Switchable between C & F	Convert your DMM with a 10 Megohm input into a Thermometer; Includes 80PK-1 Bead Probe	$105.24
K. 374ST150	80T-150UA	Universal Temperature	-50°C to 150°C -58°F to 302°F	High accuracy, fast reading for voltages below 24 Vac, 60 Vdc. Output of 1mV/°C or 1mV/°F (switchable)	$187.15

AMPROBE New!

Temperature Data Logger with RH

Measure indoor/outdoor air quality in one meter. **Features:** Digital display; Display in °C or °F, Wall mountable; RH display (models TR200/300); Memory point selection; Hi/Lo alarms threshold; No-hassle warranty.

Model	TR100	TR200	TR300
TT No.	374TE1880	374TE1898	374TE1844
Temperature Range	**Internal sensor:** -40° to 85°C (-40° to 185°C) **External probe:** -40° to 100°C (-40° to 212°F)	**Internal sensor:** -40° to 85°C (-40° to 185°C) **External probe:** -40° to 100°C (-40° to 212°F)	-20° to 70°C (-4° to 158°F)
Relative Humidity Range	N/A	0.0 to 99.9%	0 to 100%
Displays	Air temperature in Celsius/Fahrenheit	Air temperature in Celsius/Fahrenheit; RH	Temperature, RH plus Read time date/hour stamp
Includes	RS232 Cable; Download Suite software CD; User manual; Battery		USB cable; Download Suite software CD; Table feet, Users manual, batteries
PRICE	$79.95	$99.95	$154.95

AMPROBE New!

THWD-5 Relative Humidity, Temperature Meter w/Dew Point

Microprocessor-based tester designed for HVAC and plant maintenance. Easy and quick access to Wet bulb and dew point values as well as relative humidity and temperature. Includes extended probe for easy target access, a large dual LCD display and is tripod mountable. Features: Four measurements in one unit; Large digital dual display with backlight; Measure both relative humidity and temperature together; Temperature in °C or °F, front panel selectable; 0.1 degree resolution for temperature; Min/Max measurement stored; Data Hold. **Includes:** Deluxe hard carrying case; batteries and users manual.
No. 374TE1803 .....$139.95

AMPROBE New!

TMA40 Datalogging Anemometer

Provides air velocity or volume, relative humidity and temperature measurements with three ways to view the measurement. Choose between single point, multiple points up to 99, or data logging up to 2400 data points. User-selectable interval timer from 1 to 200 seconds. Flexible cord positions vane where you need to measure. Features: Large digital display with backlight; RS232 output for data result usage; Displays in Metric or English. **Includes:** RS232 interface cable; Software CD, Hard case and User manual.
No. 374TE1815 .....$299.95

AMPROBE New!

TMD-10 Dual Temperature Meter

Portable dual input thermometer. Digital display T1, T2 and T1-T2. Selectable degrees C or F. Stores and displays Min/Max reading. Measure temperature with Type AK or Type J thermocouples. **Includes:** Carrying case; two Type K probes, battery and users manual.
No. 374TE2394.....$99.95

Agilent Technologies
Authorized Distributor

N9340B 100 kHz - 3.0GHz Handheld Spectrum Analyzer

New!

Powerful new features combine with a bright new display to make this field unit faster and easier to use than ever before. Superior performance capabilities include a low -144dBm DANL, fast 10 ms min sweep time, and narrow 30Hz – 1 MHz resolution bandwidths in 1-3-10 steps. Now add great features like a spectrogram for signal stability analysis, spectrum emissions mask for measuring out-of-channel emissions, USB power sensor support, and optional AM/FM and ASK/FSK modulation analysis. Finish off with a big 6.5" TFT back-lit screen, rugged chassis and 4 hours of battery operating time, and you've got everything you need to do the job right. **Features:** Built-in battery management system; optional spare battery pack; USB for remote control and data transfer; 11-language UI.

Specifications:

- Frequency range: 100 kHz - 3.0GHz
- DANL: (RBW=30 Hz, 10 MHz <fc ≤ 1.5 GHz)
  - -124 dBm
  - -144 dBm with preamp
- Sweep time
  - 10 ms to 100 s, span ≤ 1kHz
  - <120 ms at full span
- RBW: 30 Hz to 1 MHz in 1-3-10 sequence
- VBW: 3 Hz to 1 MHz
- SSB Phase noise: < -87dBc/Hz at 30 kHz offset
- Amplitude accuracy: ±1.5 dB

Includes: Multi-language quick start tutorial; CD ROM manual, Soft carrying case.
One-Year Warranty

N9340B
Handheld Spectrum Analyzer
No. 431TE340 .....$7,982.00

3 GHz preamplifier
No. 431TE343 .....$639.00

3 GHz tracking generator
No. 431TE3400 ....$2,113.00

AM/FM modulation analysis
No. 431TE9340 .....$579.00

ASK/FSK modulation analysis
No. 431TE934 .....$579.00

Hard transit case
No. 431TE9341 .....$305.00

Battery Pack
No. 431TE9343 .....$183.00

External battery charger
No. 431TE9345 .....$193.00

Automotive 12VDC adapter
No. 431TE9342 .....$40.60

Spare AC/DC adapter
No. 431TE9344 .....$152.00

Adapter Type-N(m) 50 Ohm to Type-N (f) 75 ohm DC to 1 GHz
No. 431TE9346 .....$83.23

Agilent Technologies
Authorized Distributor

New!

Best-in-class performance, practical value!

N9320B RF Spectrum Analyzer

Uses new digital IF technology to improve amplitude accuracy and repeatability. Delivers class-leading performance from 9 kHz to 3 GHz, with a low noise floor and fast test speed. New features include AM/FM demodulation metrics, LAN interface and power meter function.

Great connectivity and user interface

- 1-button auto tune, intuitive peak search places frequency and amplitude readout immediately
- 12 markers, marker table
- LAN/USB connectivity for data/screen saving

Fast, accurate power and spectrum management

- Overall +1.5 dB amplitude accuracy
- RBW switching uncertainty < + 0.15 dB

Cost-effective tool for automated test projects

- Available SCPI commands set for IEEE488.2 compliance

No. 431TE9320 .....$7,553.00

Agilent Technologies
Authorized Distributor

New!

N9310A RF Signal Generator

Capability, reliability and affordability for generating CW and modulated RF signals. Ideal for everything from benchtop R&D to field measurements to signal monitoring and manufacturing. 9 kHz to 3 GHz frequency coverage with 0.1 Hz resolution. Wide bandwidth 40 MHz IQ modulator and all the analog modulations you need for professional grade performance at an affordable price. Clear, bright 6.5" color screen with easy-to-read soft keys lets you quickly set up signal output parameters. USB connectivity for test automation and memory stick support. Rugged body with lightweight frame.
No. 431TE1222 .....$6,980.00

BK PRECISION

Handheld Spectrum Analyzers

Small and exceptionally lightweight. Ideal for testing W-CDMA, CDMA, GSM, PDC, PHS, wireless LAN and Bluetooth systems. Model 2652 includes a tracking generator to quickly determine transmission characteristics of 2-port RF devices.

Features:

- Measuring frequency range up to 8.5 GHz
- Measure channel and adjacent power, occupied bandwidth, electric and magnetic field strength
- Min/Max hold
- Peak search
- Save/Load
- Average and over-write mode
- Marker measurement
- Auto tuning/range
- Switchable 50 or 75-input impedance

310TE2650 310TE2652 310TE2658

Model	2650	2652 New!	2658
TT No.	310TE2650	310TE2652	310TE2658
Frequency range	50 to 3.3 GHz	50 MHz to 3.3 GHz	50Hz to 8.5 GHz
Resolution bandwidth	3dB	-3dB	3dB
Video bandwidth	100Hz to 300Hz (1-3 step), OFF and AUTO	100Hz to 1MHz (1-3 step), AUTO	100Hz to 1 MHz (1-3 step), AUTO
Displayed averaging noise level	-110dBm	-110dBm	-110dBm
SSB phase noise	-90dBc/Hz	-90dBc/Hz	-90dBc/Hz
Reference level	+10 to -40dBm (1dB step)	+10 to -60dBm (1dB step)	+1 to -60dBm (1dB step)
PRICE	$5,156.25	$7,239.60	$10,828.13

PC Interface Software for Models 2650/2658 New!

Software and serial interface cable allows the Models 2650 and 2658 to display screen resolutions on a PC that are four times greater then the 250 points displayed on the horizontal axis of the 2650's LCD display. The 2650 & 2658 samples its input at 1000 points per sweep and outputs via RS 232 port to a PC (the maximum transfer rate is 38,400bps). Allows for clearer screen images and also allows spectrum analyzer setup via a PC.

No. 310TE2651 (AK2650) **$337.65**

Carrying Case for Models 2650/2658

Leather textured carrying case with strap. (LC 2650)

No. 310TE2655 ....**$208.75**

Dipole Antennas New!

For use with Models 2650 and 2658. Measure the electric field strength by connecting a dipole antenna to the input connector.

AN 301 for PDC 800 MHz and GSM 900 MHz bands
No. 310TE301 .....**$276.25**
AN 302 for PDC 1500 MHz bands
No. 310TE302 .....**$276.25**
AN 303 for PHS, W-COMA and GSM 1800/1900 MHz bands
No. 310TE303 .....**$276.25**
AN 304 for 2.4 GHz wireless LAN and Bluetooth bands
No. 310TE304 .....**$276.25**
AN 305 for 390 MHz to 410 MHz
No. 310TE305 .....**$360.10**

The most popular and useful coaxial accessories to inter-connect the 2650 and 2658 Spectrum Analyzers!

Spectrum Analyzer Coaxial Cable and Adapter Kit

Includes high-performance 24" SMA male-to-male cable assembly rated at 50Ω and 18 GHz with gold-plated SMA connectors and FEP jacketed coaxial cable. Also includes four coaxial adapters featuring SMA females for use with cable assembly: BNC male, BNC female, N type male and N type female. BNC to SMA adapters rated to 4 GHz and N type rated to 11 GHz. Both have 50Ω impedance. Includes carrying case.

No. 310TE265 .....**$154.00**

BK PRECISION

Spectrum Analyzer

Use to test cable TV levels and frequency response; test master antenna TV systems; measure communications transmitter spurious radiation; locate sources of EMI; measure unwanted RF radiation. It's a value-packed service tool for signals up to 1.05 GHz, and suitable for pre-compliance testing during development prior to third party testing. **Specs:** Frequency: 150 kHz to 1.05 GHz; IF Bandwidth (-3dB): Resolution: 800 Hz and 20 kHz, video filter on; 4 kHz; Sweep rate: 43 Hz; Amplitude: Range: -100dBm to +13dBm; Screen display range: 80dB (10dB/div); Input: Input impedance: 50Ω; Input connector: BNC; Input attenuator: 0 to 40dB (4x 10dB steps); **Tracking Generator Specs:** Output level range: -50dBm to +1dB steps; Output attenuator: 0 to 40dB; Output impedance: 50 Ohm (BNC); Frequency response: ±1.5dB; General: Display: CRT, 6". 8 x 10 div internal graticule; Trace rotation: Adjustable on front panel; Protective system: Safety Class I (IEC 348). **Includes:** Power cord, instruction manual. ***One-Year Warranty.***

No. 310TE630 .....**$2,286.46**

TDRs/Copper Testers

FLUKE networks

CableIQ™ Qualification Tester

For troubleshooting connectivity problems and qualifying cabling bandwidth. Tester also generates wiremaps and detects shorts, opens and length. See whether an existing cabling link is qualified to support 10/100, VoIP or Gigabit Ethernet, quickly isolate cabling from network problems. Detects speed and duplex settings of attached switches and PCs. Intelligent wiremap graphically shows distance to faults. Lightweight, rugged, reliable. ***One-Year Warranty.***

CableIQ™ Qualification Tester
Includes: remote adapter, 4 AA batteries, soft carrying case
A. No. 374TE444 (CIQ-100).....**$1,075.00**

CableIQ™ Advanced IT Kit
Includes: CableIQ™ mainframe, six remote identifiers, IntelliTone™ 200 Probe, and all adapters necessary for qualifying and troubleshooting cabling in the enterprise environment. Packaged in hard carrying case.
Includes: Four AA batteries.
B. No. 374TE445 (CIQ-KIT) **$1,625.00**

CableIQ™ Residential Qualifier Kit
Includes: CableIQ™ mainframe; (2) RJ45 patch cords; (2) RJ11 patch cords; USB cable; Bare wire adapter; Speaker wire adapter; Coax Cable; Coax BNC adapter; Coax RCA adapter; (50) "Qualified" Labels; CD-Rom users manual; Getting Started Guide; (4) AA batteries; Soft carrying case.
No. 374TE441 (CIQ-KRQ) **$1,175.00**

CableIQ™ Service Kit
This kit provides cabling technicians with all the essential tools needed to verify and troubleshoot network services after performing moves, adds and changes. **Includes:** Cable IQ™ mainframe, (6) smart cable ID's, IntelliTone™ 200 Probe, LinkRunner™ Network Multimeter and case.
C. No. 374TE439 (CIQ-SVC) **$2,025.00**

Cable Testers

All You'll Need for Fast, Comprehensive LAN Wiremap Verification!

MicroMapper™

Quickly and easily verify the integrity of Ethernet twisted-pair cabling for shorts, crossed, reversed and split pairs. Simply push the TEST button to automatically scan all twisted-pairs for any existing cable faults. Includes remote unit for one-person testing of installed cabling or patch cords, and a built-in tone generator to trace cable through walls, floors, and ceilings. **Includes:** MicroMapper™ and Remote, patch cable, carrying case, 6V alkaline battery and user guide. ***One-Year Warranty.*** **(USA)**
No. 374TE8245 (MT-8200-49A) **$129.00**

VisiFault™ Visual Fault Locator

Perform end-to-end continuity checks, and locate fiber breaks, pinches and bends. Illuminates fiber breaks, damaged connectors on patch cords, defective splices in splice trays, and tight fiber bends in and around equipment racks. Choice of continuous wave output mode for steady fault illumination or a flashing output mode makes for easier fault location. **Specs:** Compatibility: Multimode and Singlemode; Wavelength: 650 nm (visible wavelength); Laser safety rating: Class II; Output power: 1.0mW max.; Output: Continuous (steady) and flashing (2.3 Hz pulsed); Range: 3 km multimode, 4 km singlemode; Vibration: Random, 2g, 5-500 Hz; Battery life: >40 hours in continuous mode. **Includes:** Two AA Batteries; Carrying case: Soft side with belt loop. ***One-Year Warranty.*** (China)
No. 374TE6000 .....**$300.00**

Fiber Tester

IDEAL

SIGNALTEK™ Cable Performance Tester

Know the true performance of your network. SIGNALTEK™ provides cable installers and network technicians an innovative method to test and document the performance of voice, data and video applications.

Features:

- Gigabit performance test to IEEE 802.3 standards
- Tests gigabit Ethernet line establishment in 10 seconds
- Data monitoring detects intermittent network problems
- Internal storage for 30,000 tests or unlimited on USB device
- Prints easy-to-read Pass/Fail qualification reports
- Smart Autotest function detects presence of SIGNALTEK remote, active network device or open end cable and automatically runs appropriate test
- Save time by using a remote to perform 10/100 or gigabit service detection and initiate an Autotest when main unit is connected
- Configures multiple target IP addresses for pinging several network devices to ensure communication with servers, printers, IP cameras, home automation controls, and more
- Offers network interrogation tools such as link establishment, port LED blink and ping
- Exceeds 100m measurement distance

Includes: Near-end and remote-end handsets; Black nylon carrying case; (2) 12" RJ11 silver satin cables; (2) 24" RJ45-to-F patch cords; (2) 12" RJ45 shielded patch cords; (2)12" RJ45-to-twin alligator clip cords; (8) AA alkaline batteries; USB cable; Quickstart guide; CD-ROM User Manual. ***Two-Year Warranty.***
No. 462TE974 .....**$995.00**

FLUKE networks

A. NetTool™ Series II Inline Network Tester

Isolate and document network device and application connectivity issues in seconds. See connectivity to key network devices and services with NetProve™ diagnostics - the fastest way to isolate the source of the problem - whether the cause is the LAN, WAN, firewall, server or application. Get inline visibility into 10/100/Gig links to see actual traffic between switches, PCs, IP phones and other devices. Quickly diagnose IP phone problems and measure key call quality metrics. Verify the readiness of PoE systems and troubleshoot PoE device problems. Speed cable and fault location on active networks with IntelliTone™ digital technology. Create comprehensive reports of your network. **Includes:** NetTool™ tester; Interface cable; (4) AA batteries; Wiremap adapter; Manual,User's manual CD; Utility software.

NetTool™ Series II Inline Network Tester
No. 374TE1421 ....$2,495.00

NetTool™ II VoIP - Same as 374TE1421 with VoIP testing, monitoring and troubleshooting.
No. 374TE1423 .....$2,995.00

B. NetTool™ Series II Network Service Kit

Includes: NetTool Series II tester with 10/100/1000 mps inline, VoIP and NetSecure options; NetProve diagnostics; IntelliTone toning; IntelliTone Pro 200 Probe; NetTool Connect PC software; WireView wiremappers #1-6, 4 AA alkaline batteries.
No. 374TE5469 NTS2-NSKIT **$3,495.00**

FLUKE networks

C. NetTool™ Inline Network Tester

Solve IP phone, PC and network connectivity problems faster. Conclusively identifies a jack as Ethernet, phone, Token Ring or inactive. Quickly verify and troubleshoot desktop-to-network connectivity. Resolves such complex network configuration issues as IP address, default gateway, and email and web servers. Checks links pulse for speed, polarity, duplex, level information and receiver pair. Shows protocol mismatches between PC and network, and identifies unwanted protocols that waste valuable bandwidth. Review list of services configured to a PC. **Includes:** Tester, serial cable, 4 AA batteries and wiremap adapter. ***One-Year Warranty.*** **(USA)**

NetTool™ Professional Allows you to troubleshoot PC and network connections. See advertised and actual duplex settings, negotiated speed and link configurations. Also adds ping and reporting functions.
No. 374TE1400 (NT-Pro) **$1,495.00**

NetTool™ Standard Provides single-ended testing of a PC, cable or network drop.
No. 374TE111 (NT).....**$995.00**

D. LinkRunner™ Pro

Network link tester lets you solve a broader range of connectivity problems. Unlike traditional 10/100 link testers, LinkRunner Pro also verifies Gigabit link. **Features and Benefits:** Link at 10/100/Gig - identify device capabilities and conform actual speed/duplex status; Ping key devices - measure response of DHCP, router, DNS, and other devices or URLs; Verify 802.1X settings - authenticate with EAP type, user name, certificates, and passwords; Detect PoE service - verify voltage level, and pairs to IEEE 802.3af specifications; Identify switch port supports Cisco, Extreme and IEEE Link Layer Discovery Protocols; Test cable wiremap - measure length; detect miswires, shorts, split pairs or opens; Locate and ID cables - at patch panels; Document result - upload link status reports with USB port for faster problem resolution. **Includes:** LinkRunner Pro, WireView Cable ID #1, LinkRunner Connect software CD, USB cable, Getting Started Guide, four AA alkaline batteries.
No. 374TE312 (LRPRO-1000) **$999.00**

E. LinkRunner™ Pro Extended Test Kit

Everything you'll need to test high performance networks in one convenient kit. **Includes:** LinkRunner™ Pro multimeter, IntelliTone™ Pro 200 Probe, WireView Cable IDs #1-6, Clip-set RJ45 to 8 alligator clip care wire adapters, test accessory soft pouch, USB cable, four AA alkaline batteries, one 9V battery, deluxe Fluke Networks carry case.
No. 374TE314 (LRPRO-Kit) **$1,499.00**

FLUKE networks

TS®90 Cable Fault Finder

With the TS®90 measuring cable or identifying tone on a specific line are no longer time consuming or a two-person task. It is the fastest tool available for measuring the distance to opens and shorts - all from one end of any two or more conductor cable up to 2500'. Features a tone generator that identifies a specific pair of cables. It can measure the length of a cable or spool. Results are listed as a distance reading rather than a waveform, so it's perfect for technicians unfamiliar with TDR technology. The patented power tone gives 5 different tones for exact pair identification.

TS®90 Cable Fault Finder - Measures to 2500'
No. 300TE2659 ....$211.85

TS®100 with Alligator Clip - Measures to 3000'
No. 300TE265 .....$371.65

TS®100 with BNC to Banana to Angled-Bed-of-Nails- Measures to 3000'
No. 300TE650 .....$371.65

JDSU LanScaper™ Network Tester

Combines the functions of a high-end cable tester and length measurement device with the capability to monitor and correct network problems with the physical layer and link conditions of the network. Tests cables for proper wiring configuration and length plus troubleshoots PC and network connections while identifying network port service. Tester blinks hubs to determine connected configuration and generates multiple tone levels for signal tracing and cable identification. Unique functions include the ability to detect Phantom Power per IEEE 802.3af specifications to report current and voltage capability of analog telephone lines and to identify (map) remote while cable testing.

LanScaper™ Network Tester (only)
Includes: number 1 test remote, two 1-foot patch cables, two RJ-45 to alligator clip cables, two no-fault RJ-12 cables and documentation in a zippered Cordura® case.
A. No. 772TE700 .....**$334.71**

LanScaper™ Network Testing Kit includes: Tone Tracer, eight remote identifiers for wiremapping plus adapter cables for coax, twisted-pair and Ethernet connections in a carrying case.
B. No. 772TE750 .....**$453.44**

JDSU LanRoamer™

LanRoamer™ Tester/Analyzer
Offers a new price/performance level for verification of wiring faults and configurations on all your data cable. Displays test results on main and remote unit in less than 2 seconds after plugging in cable. Tone generator mode for use with tone tracers, auto-off. Snap-together case for easy storage and convenient patch cable testing. ***One Year Warranty.*** **(USA)**
C. No. 772TE500 .....**$85.53**

LanRoamer™ Pro Cat 5/6 Cable Tester
Identifies multiple faults clearly without interpretation for fast results. Clear wiremapping form displayed on 2-line, 16-character LCD display. Measures cable length as a stand-alone function. Tests for short, opens, miswires, reversals and split pairs. Identifies multiple faults clearly without interpretation. Includes patch cables and carrying case. ***One Year Warranty.*** **(USA)**
D. No. 772TE6000 .....**$171.88**

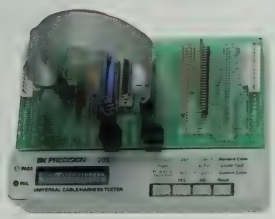
LanRoamer™ Pro Kit
Includes eight remotes with adapter cables in a handy carrying case.
One Year Warranty. **(USA)**
E. No. 772TE607 .....**$287.86**

JDSU Validator Test Tools

Both the Validator™ Network/Cabling Certifier and Validator-NT™ Ethernet System Management Tools measure and present fast, clear speed and performance results up to 1 gigabit. Plan-Um™ software (included) combines different cable criteria into concise printed reports and stores data for future use. Simply layout your customer's requirements in just minutes, define cable types and runs, test/certify each run, print the results and attach them to your invoice. Completing and billing a cable installation job has never been easier. Both units supports IEEE 802.3 data speed carrying specifications to 1 gigabit, measure cable length and distances to opens and shorts using advanced TDR technology, test telephone, coax, security/alarm, cables for continuity, proper termination and polarity, test shielded or unshielded Cat 3, 5, 5E, 6, wiremap individual runs to locate and identify cable routes, and more. The Validator-NT™ also features active network capabilities for test, link and identification, including port services, ping testing, and hub flash.

Network/Cabling Certifier includes: Validator™ main unit, smart remote, 2 lithium ion rechargeable batteries, 2 AC adapter/charger units, test connectors, Plan-Um ™ software, carrying case. **(USA)**
F. No. 772TE900.....**$1,265.40**

Ethernet System Management Tool includes:
Same as 772TE900 but also includes Active Network test tools - port discovery, ping functions, hub flash, cisco discovery protocol. Also includes two sacrificial cable and seven additional wiremap remotes.
G. No. 772TE955 .....**$1,622.25**



BK PRECISION®

Universal Cable Tester

Test just about any cable or harness in fractions of a second. This compact, stand-alone can be used for any type of wired assembly. Detects opens, shorts and miswires immediately. Test up to 128 points in a fraction of a second and store up to 50 test programs. The universal adapter card offers flexibility and convenience, ready to accept any of the most popular 22 connector styles. Includes single wire test probe. Easy-to-read LCD instantly indicates good or faulty connections and the included probe pinpoints the trouble spot. **Includes:** Single wire test probe with standard banana jack, AC/DC adapter, adapter card and manual. ***Three-Year Warranty.*** **(USA)**
No. 310TE205 .....**$1,035.00**

IDEAL

SecuriTEST™ PRO CCTV/Security Tester

All the features and functions that you need to install, test and maintain CCTV systems. Combines a CCTV video tester, PTZ camera controller, digital multimeter, UTP cable tester, video test pattern generator, PTZ protocol analyzer and camera programmer in a single compact package. Saves time and money by allowing you to test, aim, focus and program cameras when working alone. Unit is lightweight, easy-to-carry and has a sharp, bright 2.5" color LCD screen with on-screen displays for PTZ control/diagnostics and DMM readouts. Compatible with 20+ PTZ protocols. Powered by a rechargeable high-capacity lithium ion battery. **Includes:** AC Adapter/charger; 12V auto charger; 4' BNC video cable; DMM test leads; UTP cable terminator; neck strap and custom carrying case.
One-Year Warranty.
No. 462TE892.....$849.00

IDEAL

LinkMaster™ PRO XL Cable Tester Kit

Enables installers, contractors and maintenance technicians to perform all test functions for up to eight remote mapping locations on twisted pair and coax cable.

- Main tester
- Eight twisted pair remotes
- Eight CATV color coated F-terminators
- Nine RJ-45 and RJ11 jumper cables
- RJ-45 to F-connector adapter
- RJ-45 to RJ-11 adapter
- RJ-45 and RJ11 to alligator cli cable assembly
- Carrying case

LinkMaster™ PRO XL Cable Tester Kit
No. 462TE880 .....$429.29

LinkMaster™ Pro XL & ABS™ Deluxe Kit
Same as LinkMaster™ Pro XL used for detecting dial tone, polarity, presence of power and is an amplifier probe for tone tracing.
No. 462TE881 .....$521.27

LinkMaster™ Tester & Remote
No. 462TE200 .....$86.16

Paladin Tools

LAN Cable-Check™ & Telecom Cable Kit

Identify connector and cable pin-out with true cable mapping for both patch cords and installed cables. Also perform full-range continuity testing, line condition, signal tracing, and wire identification with tone generator and tone probe cable tracer. **Features:** RJ45 LAN Cable Check™ mode identifies open, crossed and shorts. Includes connector and cable pin-out with clear LED display for each pin and shield. Automatically displays mapping with dual speeds. Checks polarity of telephone power line, provides talk power for telephone lines and butt set use. Selectable dual/single tone application for balanced and unbalanced circuits, and four tone generator patterns. Includes inductive high sensitivity probe, jack for headset and audible speaker with adjustable volume control to enable use without a butt set.

Kit Includes: Toner and mapper transmitter; Tracer and mapper receiver; (2) RJ45 shielded patch cords, RJ11 cord with alligator clips, (2) 9V batteries and durable nylon carrying case with belt loop.
No. 618IE1573 .....$95.99

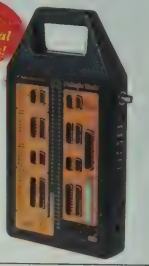
Paladin Tools

LAN & A/V Cable Check

Check Cat5, Cat5e, Cat6, RG6, RG6 Quad, RG59 cable quickly. Tests RJ45, cable TV "F", RCA, and BNC cabling. Identifies good connections, opens, shorts, cross-connections and data and telephone connection schemes. Maps cable pin-out. 15 hour continuous battery life. **Includes:** 2 RJ45 parch cords; 75 ohm male terminator, CATV "F" Female adapter, 2 CATV "F" Male to BNC adapters, 2 CATV "F" Male to RCA adapters; 9V battery and nylon carrying case.
No. 618TE1594 .....$44.99

Paladin Tools

PC Cable-Check® Pro



Maps cable and detects good connections and opens, shorts and crosses. **Features:** Quickly and easily troubleshoots cables; True cable mapping; Easy-to-read and understand with LED indicator lights; Rugged case with built-in handle; Auto or manual scan modes. Power shut-off extends battery life; Tests patch cables up to 1000': LAN & telephone, Coax 50 & 75 (600') ohm, VGA, S-video, PS/2 keyboard, Series, USB, Mini-USB, FireWire, Parallel printer. Includes 9V battery. ***One-Year Warranty.***
No. 618TE1577 .....$189.99

ByteBrothers™

Real World Certifier™ 2 w/Test Result Naming on the Fly

Identifies whether your cable is CAT 3, 5, 5E, 6 or coax. Capable of test result naming on the fly. Speed testing for 10MB, 100MB and 1000MB. Data levels of real live data from any device. Tests length (real TDR), propagation delay and skew. Wire map your cable spot opens, shorts and split pairs. Also tests inline network devices. Stores 250 tests in memory. ***One-Year Warranty.*** **(USA)**
No. 213TE1000 .....$595.00

TVR10/100/1000™ LAN Tester

Test, verify repair 10/100/1000 Base-T networks. Comprised of two units: the "main unit" and the "remote probe". The main unit performs most of the tests like determining the LAN device type and LAN speed without the need of the remote probe. The remote probe adds the ability to trace cable locations and test cables with all four pairs to insure compatibility with all three types of Base-T LANs. Tests and locates miswired cables, missing cables, cables that can not support 100Base-T operation. Tests connection to hub, PC, installed cables, and patch cables. **Includes:** Main unit; Remote probe; Batteries; RJ45 jumper, manual and pouch. **(USA)**
No. 213TE100 .....$170.00

Tone & Probe Kits

Tempo® A Textron Company

701K Classic Tone and Probe Kit – 3 pc

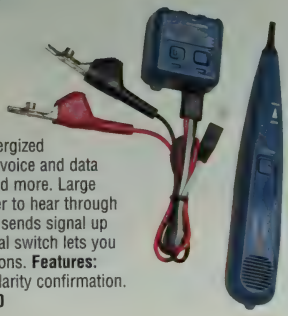
- Identifies single conductors or cables within a bundle
- **Includes:** 77HP Tone Generator and 200EP Inductive Amplifier, Case.

One-Year Warranty. **(USA)**

No. 666TE701 Kit **$110.96**

FLUKE networks

Pro3000™ Tone & Probe Kit



Professional kit for tracing and toning wire or cable. Use on de-energized AC wire, telephone/twisted pair, all voice and data category rated cable, coax cable and more. Large speaker on probe makes tone easier to hear through walls and enclosures. SmartTone™ sends signal up to 10 miles on most cables. External switch lets you select solid or alternating tone options. **Features:** Adjustable volume control. Line polarity confirmation.

No. 300TE2690.....**$87.50**

FLUKE networks

Now combines digital and analog toning in one tool!

IntelliTone™ Pro Toner and Probe

IntelliTone™ Pro 200 Toner

IntelliTone™ Pro 200 Probe

- IntelliTone digital processing eliminates noise and false signals
- New SmartTone™ analog toning precisely isolates individual wire pairs
- Identifies and diagnoses POTS with multi-line Telco detect, polarity and ring indication
- Identifies and verifies Ethernet service
- Verifies twisted-pair installation with visual end-to-end continuity test
- RJ45 input port and CableMap feature allows toner to plug directly into patch panel or wall port

IntelliTone™ Pro 200 Toner and Probe Kit

Includes: IntelliTone™ Pro 200 Toner and 200 Probe; Coax F connector adapter; (2) RJ-11 and (2) RJ-45 patch cables; Test leads with alligator clips; Lanyards; Owners CD and quick start guide; (2) 9V batteries. ***One-Year Warranty.*** (China)

No. 374TE8260 (MT-8200-60A).....**$198.00**

TECHNI-FACT

50 years

Did you know?

...The Year Techni-Tool started:

- Alaska and Hawaii were admitted as states
- Lee Petty won the first Daytona 500
- The first Barbie Doll was sold
- Explorer 6 sent the first picture of Earth from space
- The film Ben Hur premiered and won 11 Academy Awards
- A plane crash killed musicians Buddy Holly, Ritchie Valens and the Big Bopper

Lineman's Test Sets

FLUKE networks

TS®44 PRO TS®22A TS®30

JUST THE FACTS

Model	TS®44 PRO	TS®22A	TS®30
Extended range high-impedance DataSafe® operation in monitor mode	✓		
High-impedance DataSafe® operation in monitor mode		✓	✓
Data lockout protection/override	✓		
DSL/POTS filtering technology	✓		
Low/high voltage indication	✓		
Low current (mA) indication	✓		
Two-way speakerphone	✓	✓	
Waterproof – exceeds American Military Spec. MIL-STD-810E*	✓		
PBX pause button (4 seconds nominal)	✓	✓	
Replaceable 9V battery for powering speaker	✓	✓	
Speed dial memory	10 numbers, 23 digits	9 numbers, 18 digits	
Standard piercing pin clips cord	374TE5808	300TE100	300TE308
PRICE	$364.68	$345.25	$243.25
Angled bed of nails	374TE2243	300TE1009	300TE809
PRICE	$364.68	$345.25	$243.25
346A Plug	374TE2255	300TE204	N/A
PRICE	$364.68	$345.25	–

JDSU

Best Seller

Test Set with headset and bed of nails cord set!

Lil' Buttie Pro™ Test Set

Telephone test set with LCD readout and voltmeter. Has tone and pulse dialing and features a last-number redial, electronic ringer, modular cordset attachment and low-battery indicator. Headset provides hands-free convenience and microphone mute. Amplified line monitor for volume levels comparable to off-hook operation. Continuous polarity indication and battery powered monitor mode with auto-power off on dead lines or when disconnected from line. LCD shows on-hook voltage, off-hook current, number dialed, stored numbers and set-up information. Features caller ID, fault and call waiting information.

Includes: Earphone/microphone set for hands-free use, headset and angled bed-of-nails clips. ***One-Year Warranty.***

No. 772TE2200.....**$174.85**

Protective Boot

No. 772TE2220.....**$7.03**

The right light LUXO

23mm Binocular System 273 & Trinocular System 373 Microscopes

These microscopes feature 25% more magnification, 20% greater working distance and a 15% wider field of view than other models. All feature nearly 8" of working distance so you can easily maneuver an object being inspected without damaging it. Six models of the 273 binocular microscope system are available in new ESD-safe versions which are the industry's first, thanks to metal-laced paint that measures $10^5\Omega$/sq (static dissipative). Use for inspection and assembly applications in static-sensitive environments. System 373 TRU trinocular microscopes are the first to let you simultaneously view images on screen and through the eyepieces. Output directly from a USB 2.0 STD camera to a laptop or PC to view streaming video or capture still images.Both systems feature a 26" stainless steel horizontal ball-bearing boom extension and 19.5" vertical boom mounted to a 10" x 10" die-cast base. Stands can be adjusted to virtually any vertical or horizontal angle, and heads can be rotated 360° in their focus mounts. The optional dimmable 150W fiber-optic illuminator features a continuous annular ring light you can regulate to the exact amount of light you need.

New!

516IN182
shown with
Dimmable LED
Light Ring

516IN090
shown with
Fluorescent Ring

FIRST EVER TRUE ESD MICROSCOPE SYSTEM!

516IN086
shown with
Fiber Optic
Annular Ring

Specifications:

- Optical Magnification: 7X - 45X
- Video Magnification: 16.7X - 107.2X
- Optical Field of View: 32.8mm - 5.1mm
- Video Field of View: 22.9mm - 3.6mm
- Working Distance: 118mm

0.5X Aux. Lens Specifications: (Not Included)

- Optical Magnification: 3.5X - 22.5X
- Optical Field of View: 65.7mm - 10.2mm
- Working Distance: 195mm
- Video Magnification: 8.3X - 53.6X
- Video Field of View: 45.7mm - 7.1mm

0.5x Reducing Lens 23mm
No. 516IN070 .....$110.00

SAVE $200.00 *on select models until 6/30/09!*

QUICK SHIPPING! *516IN037, 516IN038, 516IN031 & 516IN033 ALL Drop Ship within 3 days! ARO Factory.*

System 273 Binocular Microscopes

New!

TT No.	Stand Option	Lighting Option	ESD-Safe	PRICE
516IN037	1	--		$1,390.00
516IN087	1	--	X	SALE $1,425.00
516IN031	1	4		$1,630.00
516IN088	1	4	X	SALE $1,665.00
516IN028	1	5		$2,145.00
516IN034	1	6		$2,015.00
516IN040	1	7		$1,565.00
516IN190	1	7	X	SALE $1,600.00
516IN042	1	8		SALE $1,740.00
516IN185	1	9		$2,180.00
516IN039	2	--		$1,465.00
516IN089	2	--	X	SALE $1,500.00
516IN033	2	4		$1,705.00
516IN090	2	4	X	SALE $1,740.00
516IN030	2	5		$2,130.00
516IN035	2	6		$2,090.00
516IN041	2	7		$1,640.00
516IN189	2	7	X	SALE $1,675.00
516IN043	2	8		SALE $1,815.00
516IN184	2	9		$2,255.00
516IN038	3	--		$1,450.00
516IN032	3	4		$1,690.00
516IN029	3	5		$2,205.00

System 373 Trinocular Microscopes

New!

TT No.	Stand Option	Lighting Option	Camera & Monitor Option	TRU Option	PRICE
516IN061	1	--	--, --		$1,700.00
516IN046	1	4	--, --		$1,940.00
516IN048	1	4	A, C		$3,535.00
516IN044	1	5	--, --		$2,455.00
516IN052	1	5	A, C		$4,050.00
516IN053	1	5	A, D		$4,435.00
516IN057	1	5	B, --		$3,760.00
516IN085	2	5	A, D	X	$4,535.00
516IN062	2	--	--, --		$1,775.00
516IN047	2	4	--, --		$2,015.00
516IN049	2	4	A, C		$3,610.00
516IN051	2	4	A, D		$3,995.00
516IN045	2	5	--, --		$2,530.00
516IN054	2	5	A, C		$4,125.00
516IN055	2	5	A, D		$4,510.00
516IN086	2	5	B, --	X	$3,860.00
516IN060	2	5	B, --		$3,835.00
516IN180	2	8	A, D		$4,305.00
516IN181	2	8	B, --		$3,630.00
516IN182	2	9	A, D		$4,570.00
516IN183	2	9	B, --		$3,895.00

Stand Options:
1 - Single Arm Boom
2 - Dual Arm Boom
3 - Articulating Arm

Lighting Options:
4 - Fluorescent Ring
5 - Fiber Optic Annular Ring
6 - Fiber Optic Dual Point
7 - LED - Ring Light
8 - Dimmable 40 LED
9 - Dimmable High Output LED

Camera Options:
A - 1/2" CCD
B - USB 2.0

Monitor Options:
C - 14" CRT
D - 15" LCD

Choice of Fluorescent Ring, Fiber Optic Annular or Fiber Optic Dual Point Illuminators!

The right light

LUXO

System 250/350 Stereo Zoom Systems

Binocular and Trinocular systems include: 0.65 – 4.5 Zoom Range, 45 Degree Stereo Zoom body, 10x Widefield Eyepieces w/eyeshields, Parfocal Zoom. Trinocular Systems w/cameras also include: Video adapter w/0.5x lens, 12V Power supply w/power cord, and S-Video cable. (China)

Specifications:
- Optical Magnification: 6.5x - 45x
- Video Magnification: 17x - 117x
- Optical Field of View: 31mm - 4.5mm
- Video Field of View: 17mm - 2.3mm
- Working Distance: 95mm

0.5 Aux. Lens Specs *(Not Included):*
- Optical Magnification: 3.3x - 22.5x
- Video Magnification: 9x - 59x
- Optical Field of View: 61.5mm - 8.9mm
- Video Field of View: 31mm - 5.0mm
- Working Distance: 150mm

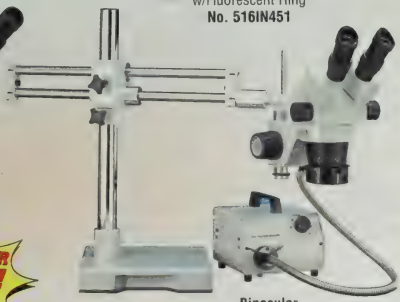
No. 516IN750 .....$125.00

Trinocular Video System No. 516IN8718

Binocular w/Fluorescent Ring **No. 516IN451**

Best Seller

Binocular w/Fluorescent Ring **No. 516IN8712**



Binocular w/Fiber Optic Annular Ring **No. 516IN0711**

QUICK SHIPPING!
516IN714, 516IN8712, 516IN005 & 516IN0712 ALL Drop Ship within 3 days! ARO Factory.

NEW LOWER PRICE! on 516IN022 & 516IN024!

System 250 Binocular Systems

TT No.	Base Style	Lighting Option	PRICE
516IN714	Single Arm Boom	None	$1,330.00
516IN8712	Single Arm Boom	Fluorescent Ring	$1,500.00
516IN711	Single Arm Boom	Fiber Optic Annular Ring	$2,085.00
516IN021	Single Arm Boom	LED Ring	$1,505.00
516IN022	Single Arm Boom	Dimmable LED Ring	$1,880.00
516IN005	Dual Arm Boom	None	$1,405.00
516IN0712	Dual Arm Boom	Fluorescent Ring	$1,645.00
516IN0711	Dual Arm Boom	Fiber Optic Annular Ring	$2,160.00
516IN023	Dual Arm Boom	LED Ring	$1,580.00
516IN024	Dual Arm Boom	Dimmable LED Ring	$1,955.00
516IN020	Dual Arm Boom w/Clamp	LED Ring	$1,437.95
516IN451	Articulating Arm	Fluorescent Ring	$1,630.00
516IN8711	Articulating Arm	Fiber Optic Annular Ring	$2,145.00

USB 2.0 Camera w/6' Cable

Features:
- Connects to USB 2.0 port on laptop or PC
- 1/3" progressive color scan
- XGA model resolution
- 1024H x 768V imaging pixels at full scan
- 0.45 or 1.0 Gamma (variable software set)
- Electronic or fixed shutter
- AGC On/Off Selectable
- Compact Size with C-Mount

No. 516IN8792 ....$1,215.00

System 350 Trinocular Systems

TT No.	Base Style	Lighting Option	Video Options	PRICE
516IN716	Single Arm Boom	Fluorescent Ring	None	$1,930.00
516IN718	Single Arm Boom	Fluorescent Ring	1/2 CCD Camera, 14" Color CRT Monitor	$3,525.00
516IN8719	Single Arm Boom	Fiber Optic Annular Ring	1/2 CCD Camera, 14" Color CRT Monitor	$4,040.00
516IN1871	Single Arm Boom	Fiber Optic Annular Ring	1/2 CCD Camera, Video Capture Software*	$4,160.00
516IN025	Single Arm Boom	Fiber Optic Annular Ring	USB 2.0 Camera, Video Capture Software**	$3,750.00
516IN8716	Dual Arm Boom	Fluorescent Ring	None	$2,005.00
516IN8718	Dual Arm Boom	Fluorescent Ring	1/2 CCD Camera, 15" LCD Display	$3,985.00
516IN016	Dual Arm Boom	Fiber Optic Annular Ring	1/2 CCD Camera, 15" LCD Display	$4,500.00
516IN026	Dual Arm Boom	Fiber Optic Annular Ring	USB 2.0 Camera, Video Capture Software**	$3,825.00

** Video Capture Software = FG1 Frame Grabber 3D 16MB Kit*
***Video Capture Software - No Card Required - Connects Directly to Laptop or PC USB Port*

O.C. White Co.
Quality Since 1894

Plugs directly into your PC – no separate monitor needed!

Pro-Zoom Digital Trinocular Microscope and Image Acquisition System

This new system brings world-class digital microscopy within everyone's reach. It delivers incredible image quality through complete control of exposure and gain down to the individual pixel level. The user-friendly software gives you full camera control, a simple interface for image capture and advanced annotation and measurement features. And the microscope plugs directly into your PC or laptop via USB 2.0, eliminating the need for a separate monitor.

(Laptop not included)

Standard features include:

- Still image capture
- Streaming video capture with audio voiceover
- Superb color reproductions with white balance functionality
- Image annotation and labeling
- Exclusive built-in on-screen reticule and video average light controls
- 1.3 megapixel camera with 1280 X 1024 resolution @ 15 fps
- 1.0 – 6.5 x metal pod (range of 2.5 – 390x)
- Extra large eyepieces with 23mm field of view
- .5x auxiliary lens (195mm working distance)
- ESD safe

ProZoom 6.5 Digital Trinocular Microscope with articulating arm, fiber optic ring light
No. 886IN134 (TKDPZT-FA-A).....**$3,896.00**

ProZoom 6.5 Digital Trinocular Microscope with ball bearing base, fiber optic ring light
No. 886IN132 (TKDPZT- A).....**$3,895.00**

ProZoom 4.5 Digital Trinocular Microscope with articulating arm, fiber optic ring light
No. 886IN136 (TKDTZ-FA-A) **$3,395.00**

ProZoom 4.5 Digital Trinocular Microscope with ball bearing base, fiber optic ring light
No. 886IN135 (TKDTZ-A) **$3,395.00**

O.C. White Co.
Quality Since 1894

Pro-Zoom Binocular and Trinocular Microscope Systems

The Ultimate microscope for manufacturing applications. Systems feature 1.0 x 6.5x enhanced magnification range with 10x eyepieces and 2.5x to 390x with optional eyepieces and lenses. Increased working distances at higher magnification levels let you view clear, crisp images with the largest zoom range in the industry. Extremely large eyepieces enhance comfort. Solid brass internal construction. Pod features unlimited angle adjustments and moves on double ball-bearing arm. All this and a full 5-year guarantee.

Trinocular systems also include a free upgrade to a 22" HD LCD Flat Panel Monitor, and lets you see both the screen image and eyepiece image at the same time. Optional new frame grabber and measurement software available.

HIGH END FEATURES AT AN ECONOMICAL PRICE!

TRINOCULAR SYSTEM UPGRADED WITH A FREE 22" HD LCD MONITOR

884IN087

884IN118

Binocular Systems

TT No.	Base Style	Lighting Option	PRICE
886IN084	Dual Arm Boom	None	$1,775.00
886IN087	Dual Arm Boom	Fluorescent Ring	$1,995.00
886IN090	Dual Arm Boom	Variable LED	$1,965.00
886IN093	Dual Arm Boom	Fiber Optic Annular Ring	$2,495.00
886IN096	Dual Arm Boom	Fiber Optic Dual Point	$2,445.00
886IN085	Articulating Arm	None	$1,775.00
886IN088	Articulating Arm	Variable LED	$1,996.00
886IN091	Articulating Arm	Fiber Optic Dual Point	$1,966.00
886IN094	Portable Articulating Arm	Fluorescent Ring	$2,496.00
886IN097	Portable Articulating Arm	Fiber Optic Annular Ring	$2,446.00

Trinocular Systems

TT No.	Base Style	Lighting Option	Video Options	PRICE
886IN108	Dual Arm Boom	None	1/2" NTSC Camera and 22" HD LCD Monitor	$4,245.00
886IN111	Dual Arm Boom	Fluorescent Ring		$4,455.00
886IN118	Dual Arm Boom	Fiber Optic Annular Ring		$4,695.00
886IN121	Dual Arm Boom	Fiber Optic Dual Point		$4,645.00
886IN109	Articulating Arm	None	1/2" NTSC Camera and 22" HD LCD Monitor	$4,245.00
886IN112	Articulating Arm	Variable LED		$4,455.00
886IN119	Portable Articulating Arm	Fluorescent Ring	1/2" NTSC Camera and 22" HD LCD Monitor	$4,696.00
886IN122	Portable Articulating Arm	Fiber Optic Annular Ring		$4,646.00

Choice of Fluorescent Ring w/Glare Free Full Spectrum Bulb, Adjustable Halogen, Fiber Optic Annular or Fiber Optic Dual Point Illuminators!

Prolite®

Prolite® Binocular Stereo Zoom Systems

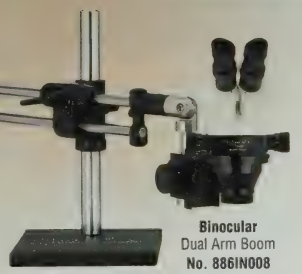
Binocular systems include: 45 Degree Stereo Zoom body, 0.7x - 4.5x, 22mm WF-10x Eyepieces w/protective eyeguards, 0.5x Auxiliary lens, ESD-Safe, Parfocal Zoom.

Ring Adapter Specs:
Optical Magnification: 7x - 45x
Video Magnification: 15.6x - 100.2x
Optical Field of View: 28.6mm - 4.8mm
Video Field of View: 12.7mm - 2.4mm

0.5 Aux. Lens Specs:
Optical Magnification: 3.5x - 22.5x
Video Magnification: 7.8x - 50.1x
Optical Field of View: 57.2mm - 9.6mm
Video Field of View: 33.4mm - 4.8mm

Binocular
Dual Arm Boom
w/Fiber Optic
Annular Ring
No. 886IN535

Binocular
Lab Style Base
No. 886IN540



Binocular
Dual Arm Boom
No. 886IN008

Binocular Systems

TT No.	Base Style	Lighting Option	PRICE
886IN0003	Lab Style	None	$695.00
886IN540	Lab Style	Fluorescent Ring	$895.00
886IN008	Dual Arm Boom	None	$1,220.75
886IN532	Dual Arm Boom	Fluorescent Ring	$1,545.00
886IN536	Dual Arm Boom	Fiber Optic Dual Point	$1,855.00
886IN535	Dual Arm Boom	Fiber Optic Annular Ring	$1,995.00
886IN011	Articulating Arm, Clamp On	None	$1,285.00
886IN533	Articulating Arm, Clamp On	Fluorescent Ring	$1,545.00
886IN014	Articulating Arm, Clamp On	Fiber Optic Dual Point	$1,945.00
886IN511	Articulating Arm, Clamp On	Fiber Optic Annular Ring	$1,995.00

Choice of Fluorescent Ring w/Glare Free Full Spectrum Bulb, Fiber Optic Annular or Fiber Optic Dual Point Illuminators!

Binocular and Trinocular Stereo Zoom Systems

Binocular and Trinocular systems include: 45 Degree Stereo Zoom body, 0.7x - 4.5x, WF-10x Eyepieces w/protective eyeguards, 0.5x Auxiliary lens, ESD-Safe, Parfocal Zoom. Trinocular Systems also include: 0.6x CCD Adapter, Focus arm, All related cables and power supplies. (Japan)

Ring Adapter Specs:
- Optical Magnification: 7x - 45x
- Video Magnification: 18.7x - 120.2x
- Optical Field of View: 28.6mm - 4.8mm
- Video Field of View: 12.4mm - 2.1mm

0.5 Aux. Lens Specs:
- Optical Magnification: 3.5x - 22.5x
- Video Magnification: 9.4x - 60.1x
- Optical Field of View: 57.2mm - 9.6mm
- Video Field of View: 33mm - 4.4mm

No. 478IN023 .....$100.00

Trinocular
Video System
No. 886IN811

Binocular
w/Fluorescent
Ring
No. 886IN703

Binocular
w/Fiber Optic
Annular Ring
No. 886IN704

Binocular
w/Fiber Optic
Dual Point
No. 886IN705

Binocular Systems

TT No.	Base Style	Lighting Option	PRICE
886IN702	Dual Arm Boom	None	$2,060.00
886IN703	Dual Arm Boom	Fluorescent Ring	$2,389.00
886IN704	Dual Arm Boom	Fiber Optic Annular Ring	$2,869.00
886IN705	Dual Arm Boom	Fiber Optic Dual Point	$2,819.00
886IN706	Clamp On Articulating Arm	None	$2,160.00
886IN707	Clamp On Articulating Arm	Fluorescent Ring	$3,379.00
886IN708	Clamp On Articulating Arm	Fiber Optic Annular Ring	$3,379.00
886IN709	Clamp On Articulating Arm	Fiber Optic Dual Point	$3,329.00

Trinocular Systems*

TT No.	Base Style	Lighting Option	Video Options	PRICE
886IN0001	Dual Arm Boom	Fiber Optic Annular Ring	1/2 NTSC Camera, 14" Sony LCD Display	$5,485.00
886IN811	Dual Arm Boom	Fiber Optic Dual Point	1/2 NTSC Camera, 14" Sony LCD Display	$5,235.50
886IN812	Clamp On Articulating Arm	None	1/2 NTSC Camera, 14" Sony LCD Display	$4,686.50
886IN813	Clamp On Articulating Arm	Fiber Optic Annular Ring	1/2 NTSC Camera, 14" Sony LCD Display	$5,285.50
886IN814	Clamp On Articulating Arm	Fiber Optic Dual Point	1/2 NTSC Camera, 14" Sony LCD Display	$5,235.50

**0.5 Aux. Lens Not Included*

SCIENSCOPE *Choice of Fluorescent, LED or Fiber Optic Annular Illuminators!*

Binocular and Trinocular Stereo Zoom Systems

Binocular and Trinocular systems include: 45 Degree Stereo Zoom body, 10x Eyepieces, 0.5x Auxiliary Lens, Ring Light Adapter, ESD-Safe scope cover. Trinocular Systems also include: 0.5x Video coupler, Focus mount. (China)

Ring Adapter Specs:
- Optical Magnification: 6.7x - 45x
- Video Magnification: 20x - 135x
- Optical Field of View: 32.8mm - 4.9mm
- Video Field of View: 18mm - 2.6mm

0.5 Aux. Lens Specs:
- Optical Magnification: 3.4x - 22.5x
- Video Magnification: 10x - 66x
- Optical Field of View: 65.7mm - 9.8mm
- Video Field of View: 36mm - 5.2mm

696IN048

696IN5000

696IN333

696IN051

SS2 Binocular Systems

TT No.	Base Style	Lighting Option	PRICE
696IN014	Single Arm Boom	Fluorescent Ring	$1,450.00
696IN031	Single Arm Boom	LED Ring	$1,695.00
696IN5000	Dual Arm Boom	Fiber Optic Annular Ring	$1,925.00
696IN5001	Dual Arm Boom	LED Ring	$1,695.00
696IN500*	Articulating Arm	None	$1,250.00
696IN032	Articulating Arm	Fluorescent Ring	$1,500.00
696IN333	Articulating Arm	LED Ring	$1,645.00

**Does not include 0.5x Aux. Lens or Ring Light Adapter*

SS2 Trinocular Systems

TT No.	Base Style	Lighting Option	Video Options	PRICE
696IN051	Dual Arm Boom	Fiber Optic Annular Ring	USB Color Camera	$2,930.00
696IN6666	Dual Arm Boom	Fiber Optic Annular Ring	1/3 Camera, 14" Color Monitor	$3,355.00
696IN049	Dual Arm Boom	Fiber Optic Annular Ring	XGA Camera, 17" LCD Display	$3,480.00
696IN054	Dual Arm Boom	LED Ring Light	USB Color Camera	$2,700.00
696IN033	Dual Arm Boom	LED Ring Light	1/3 CCD Camera, 14" Color Monitor	$3,225.00
696IN048	Dual Arm Boom	LED Ring Light	XGA Camera, 17" LCD Display	$3,250.00

SCIENSCOPE *Simplify Your Work!*

ELZ Mini Stereo Zoom Microscope

High performance optics and features without the high price tag. Suitable for all industrial electronics and educational inspection applications. Internal mechanics based on dependable SSZ series single spindle design. Sealed microscope body stands up to harsh environments as well as cleanroom use. Compatible with all Scienscope mounting and hardware accessories.

- **High quality and performance** - 20% brighter light transmission and improved image resolution.
- **Maintenance-free** - Highly durable, reliable microscope body and eyepieces require no maintenance.
- **Upgradeable system** - Available upgrades for eyepieces, objective lens, light sources and more let you adapt to changing needs

Specs: Eyepieces Inclination: 60°; **Dioptric Adjustment:** Dual Independent **Optional Objective Lenses:** 0.5x and 20x; **Optional eyepieces:** 10x, 15x, and 20x; **Objective Magnification Range:** 0.7x to 3x; **Field of View:** 31.4-7.3 **Working Distance:** 100mm; **Interpupillary Adjustment:** 46mm - 76mm

Includes: ELZ binocular body; Single arm boom stand; LED adjustable ring light; Focus mount; 10X eyepiece.

A. No. 696IN0045 .....~~$1148.85~~ **SPECIAL $999.99**

Same as above with Articulating Arm
B. No. 696IN047 .....**$1,385.00**

0.5X Objective Lens
No. 696IN502 .....**$100.00**

696IN047

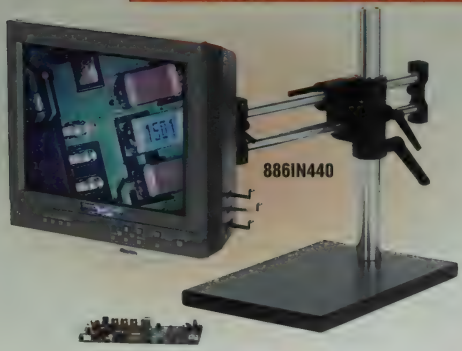
O.C. White Co.
Quality Since 1894

Zoom Capabilities Without a Microscope!

Super Scope® High Resolution Inspection System

Enjoy high resolution, real-time color images that are crisp and clear without the eye fatigue and back pain associated with microscope use. Capture images for archiving or transferring via e-mail with voice-over to anyone, anywhere over the Internet. Standard magnification range of 4-45x and up to 80x with optional 2x lens. **Features:** 14" Sony Professional, self-contained, innovative LCD video system combined with a high resolution, high sensitivity custom 1/2" camera. Includes audio and extra video input and output ports. Choice of light source and base. All cables and power cords included.

TT No.	Model	Base Style	Lighting Option	PRICE
886IN440	TKSS-40	Dual Arm Boom	Fluorescent Ring	$4,995.00
886IN034	TKSS-40-LV	Dual Arm Boom	Variable LED	$4,945.00
886IN039	TKSS-FA-F	Articulating Arm	Fluorescent Ring	$4,995.00
886IN035	TKSS-FA-LV	Articulating Arm	Variable LED	$4,945.00



SCIENSCOPE

XGA Resolution Macro Video Inspection System

Combines the crisp clarity of a high resolution XGA 1024 x 768 analog camera with the space-saving convenience of an LCD monitor. Macro video optics provide detailed inspection up to 60x or super large fields of view with infinite working distance. **System includes:** macro video lens; XGA camera (1024 x 768); 17" LCD monitor; LED lighting and dual arm ball bearing boom stand with focus mount.
No. 696IN046 .....**$2,704.30**

XGA Camera Specifications:

Sensor size: 1/2.5
Frame rate: 60fps
Output: D-sub 15 pin analog signal
Lens mount: C-mount
Operation voltage: DC-5V
Dimensions: 70mm x 52mm x 51mm

O.C. White Co.
Quality Since 1894

Superb Ergonomics, wide magnification range, incredible working distance and field-of-view!

Prolite® Macro-Zoom System

Features:

- Macro-zoom lens delivers outstanding working distance and field-of-view
- Parfocaled over entire zoom range
- Magnification range up to 60x
- Clear 1/2" high sensitivity NTSC camera brings images to life
- Exclusive steel ball bearing arm with 24" weighted base
- 24" post included for increased functionality
- Ergonomic design
- 22" Sony Professional LCD monitor
- Exclusive angular mount adjustment
- ESD safe
- ***5-Year Warranty***

Macro video system with 22" LCD and Micro Lite FL3000-A 150 Watt fiber optic annular light source
No. 886IN2003 (TKMACZ-24-A) **$3895.00**

Macro video system with 22" LCD and Micro Lite FL3000-D 150 Watt fiber optic dual point light source.
No. 886IN2004 (TKMACZ-24-D) **$3845.00**

Macro video system with 22" LCD and Micro-Lite LV2000
No. 886IN2002 .....**$3590.00**

Macro video system with 22" LCD, no light
No. 886IN2001 .....**$3295.00**

Micro-Lite Fully Variable LED Ring Illuminator with 48 LEDs
No. 886IN2000.....Reg. ~~$399.00~~
SALE $299.00

Milwaukee

See Everything Over, Under, Inside and Behind!

Handheld Digital Inspection Camera

Handheld, one-handed operation with high resolution digital picture quality. Digital zoom up to 200% on a reduced-glare, 2.4" color LCD display with 3x brightness control. Camera head fits easily into 3/4" holes. Waterproof, 3' camera cable. Extended battery run-time and auto shut-off. **Includes:** 12V Li-Ion battery with 30 minute quick charger or 4AA batteries.

Camera w/12V Li-Ion Battery and Charger
No. 575IN1021 .....**$355.20**

Camera w/4AA Batteries
No. 575IN0020 .....**$273.60**

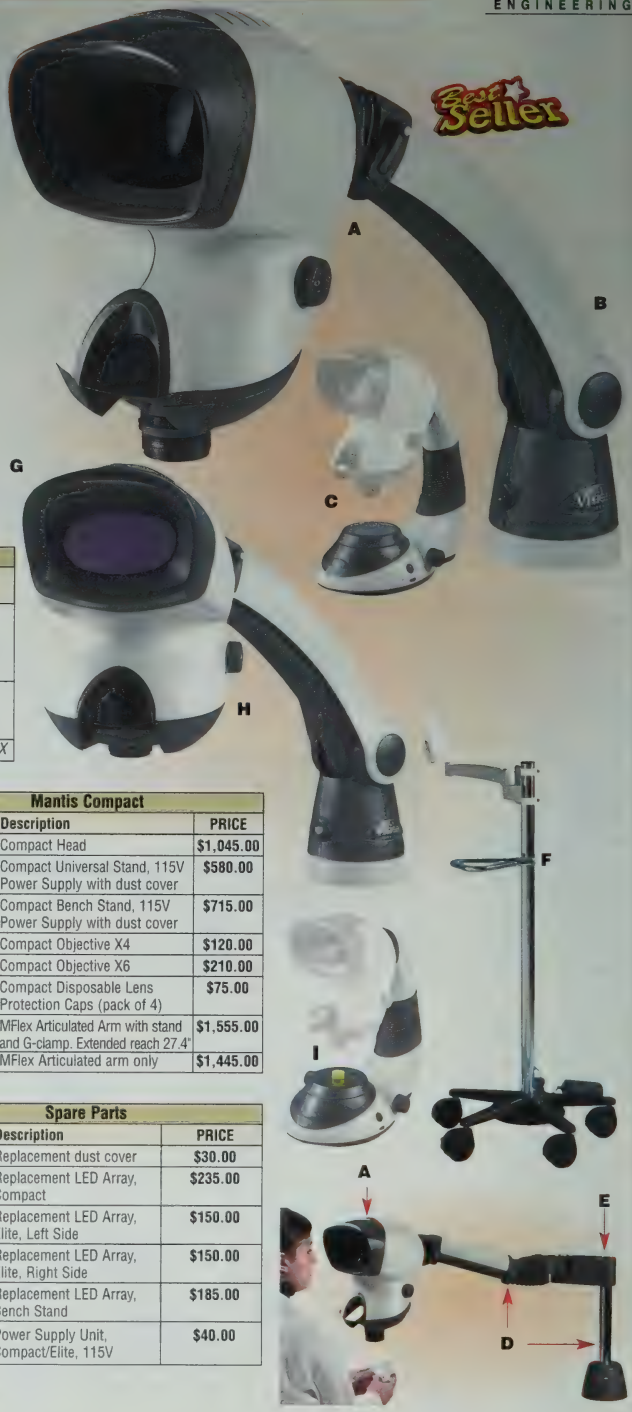
FREE ESD and chemical audits – just call 800-832-4866!

Mantis Stereo Viewing Systems

Mantis combines the viewing ease of bench magnifiers with the high resolution and magnification of a microscope. The Mantis large viewing area promotes maximum comfort while producing razor sharp, three dimensional stereo images. Operators will no longer suffer from eye, neck or back strain commonly associated with eyepiece technologies. Safety glasses or corrective vision eyeglasses may be worn in comfort during use. A variety of magnification options allows for unit customization for your unique application – assembly, inspection or rework.

Mantis Compact and Elite models are the next generation delivering the latest in optical technology to provide precise, sharp stereo magnification. Mantis Compact excels in low magnification range for inspection or manipulation tasks where bench magnifiers have traditionally been used. Mantis Elite offers a wider, higher performance specification including higher magnification, field of view and working distance plus 25° head tilt capability.

Features: Choice of a stand. Counter balanced universal stand with swing arm and quick move G-clamp base or high stability bench stand with integral focus, dimmable substage illumination and a floating stage option.



JUST THE FACTS

	Objective Lenses	Working Distance	Field of View	Lighting
Elite	X4	96mm	34mm	24 LEDs; 11,000 LUX;
	X6	68mm	23mm	
	X8	59mm	17mm	
	X10	54mm	13.5mm	
	X15	40mm	8.8mm	20 LEDs; 9,400 LUX
Compact	X4	96mm	27.5mm	
	X6	73mm	19.2mm	

Substage illumination -both models - (bench stand only) 13 LEDs; 1,200-4,000 LUX

Mantis Elite

TT No.	Description	PRICE
A 848IN4005	Elite Head	$1,595.00
B 848IN4006	Elite Universal Stand, 115V Power Supply with dust cover	$685.00
C 848IN4007	Elite Bench Stand, 115V Power Supply with dust cover	$700.00
848IN4008	Elite Objective X4	$160.00
848IN4009	Elite Objective X6	$350.00
848IN4010	Elite Objective X8	$485.00
848IN4011	Elite Objective X10	$500.00
848IN4012	Elite Objective X15	$565.00
848IN256	Elite Disposable Lens Protection Caps for X4, X8, X10 (pack of 4)	$105.00
848IN4017	Elite Disposable Lens Protection Caps for X6 (pack of 4)	$85.00
D 848IN4031	MFlex Articulated Arm with stand and G-clamp. Extended reach 27.4"	$1,555.00
848IN4032	MFlex Articulated arm only	$1,445.00

Mantis Compact

TT No.	Description	PRICE
G 848IN4000	Compact Head	$1,045.00
H 848IN4001	Compact Universal Stand, 115V Power Supply with dust cover	$580.00
I 848IN4002	Compact Bench Stand, 115V Power Supply with dust cover	$715.00
848IN4003	Compact Objective X4	$120.00
848IN4004	Compact Objective X6	$210.00
848IN4015	Compact Disposable Lens Protection Caps (pack of 4)	$75.00
D 848IN4029	MFlex Articulated Arm with stand and G-clamp. Extended reach 27.4"	$1,555.00
848IN4030	MFlex Articulated arm only	$1,445.00

Spare Parts

TT No.	Description	PRICE
848IN4019	Replacement dust cover	$30.00
848IN4020	Replacement LED Array, Compact	$235.00
848IN4021	Replacement LED Array, Elite, Left Side	$150.00
848IN4022	Replacement LED Array, Elite, Right Side	$150.00
848IN4023	Replacement LED Array, Bench Stand	$185.00
848IN4024	Power Supply Unit, Compact/Elite, 115V	$40.00

Accessories

TT No.	Description	PRICE
848IN4014	Floating Stage	$350.00
E 848IN4033	MFlex Articulated Arm Extension Extends reach to 33.3"	$325.00
F 848IN4034	Mantis Wheeled Floor Stand w/Weighted Base	$2,205.00

Lynx® Microscope w/LED Illuminator

Vision ENGINEERING

Provides bright white, shadow-free illumination for up to 10,000 hours at a fraction of the running costs of conventional halogen systems. Objective lens: x0.5 with long working distance; x0.7 with long working distance; x1.0 with short working distance; x1.5 with short working distance; 2.0 with short working distance.

Ideal for intricate tasks requiring high-resolution stereo viewing, the eyepieceless optics significantly increases head freedom and eye relief, reducing operator stress and fatigue over long periods of time. Used in a wide range of industry applications including general manufacturing, electronics, precision engineering, medical devices, and more.

Features:

- Superior ergonomics
- x2.1 - x120 stereo zoom magnification (x7 - x40 standard)
- Modular design allows for easy addition of accessories
- Patented optical technology provides superb hand-to-eye coordination
- Bench stand or flexible boom mount versions

Stereo Microscope w/LED Illuminator
No. 848IN060 .....**$7,375.00**

14-point LED Illuminator for Lynx
No. 848IN061 .....**$2290.00**

Boom Mount Systems

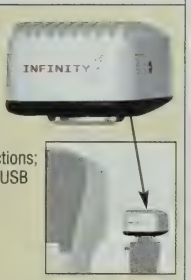
Includes: Lynx stereo head and dust cover, boom, focus assembly and glare shield, six point ring light illuminator attachment, boom mount featuring 17" adjustable reach, mounting plate for boom mount transformer and illuminator, and 250-watt illuminator and transformer with dimming control. *(Objective lens not included)*
No. 848IN040 .....**$5,755.00**

LED Illuminator Selection					
Objective lens	x0.5	x0.7	x1.0	x1.5	x2.0
Long working distance	•	•	–	–	–
Short working distance	–	–	•	•	•

Vision ENGINEERING

New!

Lumenera USB Camera



Easy to setup. 1.3 or 5.0 mega pixel CMOS camera. Fits Lynx, Alpha, Beta, Civet, Hawk, Kestrel and Peregrine systems. **Features:** Image capture with live image display; Wide range of image measurement functions; image switching to piece together or separate images; USB connection uses standard format (jpeg, bmp, etc); Image archiving functions.

No. 848IN113 1.3MP **$1,835.00**
No. 848IN131 3.1MP **$2,535.00**
No. 848IN150 5.0MP **$3,535.00**

Illuminators

The right light LUXO

Dimmable LED Ring Light

Tired of replacing halogen lamps in your fiber optic lighting? Luxo's dimmable LED ring light lasts for 50,000 hours. Maximize light output, distribution, and prevents harmful glare and reflections. Its modular construction paired with brilliant 40 LED in the single ring and 80 LED in the double ring display, and 6000°K color temperature, makes this ideal for inspecting surface cracks and defects, welds, lead-free solders joints, flux residues and hairline stress cracks. Removable/replaceable diffuser allows for easy cleaning. ***5-Year Warranty.***

No. 516IN186 80 LED **$790.00**
No. 516IN027 40 LED.....**SALE $550.00**
No. 516IN8744 30 LED **$175.00**

NEW LOWER PRICE!

Transparent light LUXO

Conformal Coatings UV Ring Light

Enhances inspection of conformal coatings. Coatings glow under 17-watt black ultraviolet illumination. Mounts directly on scope.
No. 516IN8745.....**$290.00**

Fluorescent Ring Light - 17W
No. 516IN742 .....**$240.00**

Fiber Optic Illuminator
150W halogen light source. Dimmable.
No. 516IN050.....**$320.00**

Fiber Optic Ring Light
No. 516AC001.....**$435.00**

Fiber Optic Dual Gooseneck
No. 516IN056 .....**$305.00**

Single Gooseneck (not shown)
No. 516IN0560 .....**$195.00**

A. Shadowless Ring Light

ESD safe fluorescent with Hi-low intensity level. Mounts directly on scope. Recommended for magnification up to 45X. **(USA)**

TT No.	Compatibility	PRICE
560IN100	Fits OC White, Pro-Lite, Meiji	$199.00
560IN1011	Fits Scienscope	$179.00
560IN069	Fits Olympus	$229.00
560IN1001	Fits Clearview	$229.00

B. Dimmable Ring Light

Patented microchip dimmable fluorescent technology allows you to control the amount of light you get. High frequency, electronic ballast with no humming or flickering. Delivers a more natural light that's easier on your eyes. Fits objective lenses up to 2.35".
No. 560IN110 .....**$295.00**

Replacement bulbs

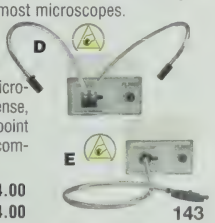
Anti-Glare White
No. 560IN101 .....**$40.00**

Full Spectrum White
No. 560IN150 .....**$40.00**

C. Fully Variable LED-based Illuminator

Long life, low cost, and energy saving microscope light source. **Features:** 360°, shadow-free uniform illumination; low voltage requirement, and reduced glare. Adjustable brightness from 25% to 100%. Fits most microscopes.
No. 560IN070 (LV-1000).....**$169.00**

FL 3000 Micro-Lite®



No more burned-up fiber optics! The FL 3000 Micro-Lite features, solid state design with 45% more intense, cool, white light due to the internal IR filter. Dual point Illuminator includes two focusable lenses. Steel components for ESD safety. **(USA)**

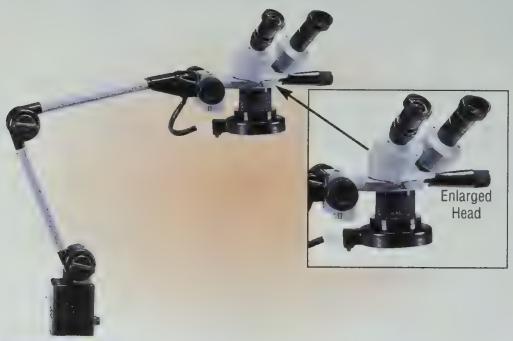
D. No. 560IN301 Dual Point Gooseneck ..**$624.00**
E. No. 560IN300 Annular Ring Light.....**$674.00**

Dino-Lite Digital Microscope

New!

Dino-Lite USB digital handheld microscopes connect to the USB port of your computer with a single cable. The amazing range of focus lets you photograph, display, and print images of almost anything. **Includes:** DinoCapture software for PC & MAC for capturing and storing pictures, real-time video, or time-lapsed video.

TT No.	Model	Description	PRICE
Microscopes			
876IN412	AM412MN	NTSC Standard Video Output; Interfaces to TV set or TV Monitor; 0-50x, 200x Magnification; 0.3 MP/ Resolution 510 x 496	**$290.00**
876IN413	AM413T	0X~50x, 200x Magnification; 1.3M / Resolution 1280x 1024; w/Measurement feature ; Built-in 8 white LED's	**$480.00**
876IN414	AM413ZT (Polarize)	Built in polarizing kit can be switched on/off; "Micro-Touch" (trigger button); 10X~70x, 230x Magnification; digital "zoom in" VGA up to 330x; 1.3M / Resolution 1280x 1024	**$580.00**
876IN415	AM311S	0.3M / Resolution 640x480; USB 2.0 Output; 0X~50x, 200x Magnification; Built-in 8 white LED's	**$230.00**
876IN416	AM411T	0X~50x, 200x Magnification; 1.3M / Resolution 1280x 1024; Built-in 8 white LED's	**$420.00**
Stands			
876IN417	MS35B	Medium duty, boom stand with vertical posts, rack and pinion focusing. 11.5" post height, 6" x 8.5" base, rubber feet. 9.5" maximum clearance for 3.6:1 magnification range. With Dino-Lite AM413T field-of-view is ~0.87" at 0.5" elevation and ~3.1" at 9" elevation.	**$100.00**
876IN418	MS32	Designed with an extendable flexible arm and sturdy, weighted base, providing an infinitely adjustable point of view. Black with white holder.	**$50.00**
876IN419	MS36B	Same as 876IN417 with addition of adjustable horizontal arm.	**$169.00**



HOZAN

L-52 Inspection Stereoscope

1x – 2x revolving stereoscope with convenient, space saving, flexible arm that locks into position and can be mounted with screws or by clamping onto workstation. Stereo head can be rotated 360 degrees and has 45 degree inclined eyepieces for comfort. 10x wide field Eyepieces can be adjusted both for focus as well as being able to spread 55 – 74mm. Fluorescent ring light and desk mount clamp are included. **Specs:** Magnification: 10x –20x (5x – 10x when using 0.5x auxiliary lens); Max working distance: 90mm. (Japan)

No. 445IN052 .....**$924.65**

The right light LUXO

LuxoFlex 35W Halogen Light

This light series offers a powerful 35W halogen light for crisp, brilliant illumination and low heat output. The 40" gooseneck arm provides total flexibility in positioning the light where needed. **Specs:** Shade: Nylon, 30% glass-filled; Reflector: In light source; Color: Black; Power requirements: 120 VAC, 60Hz with 3-conductor SJT grade cord and plug; Mounting: Edge clamp.

Edge clamp
No. 516IN1234 .....**$170.00**
Replacement Bulb
No. 516IN21060 .....**$12.00**

Microscope/ Magnifier Covers

Washable polyester and carbon cover. Surface Resistivity: 1x10E5-1x10E6. Includes grounding snaps. Compatible w/class 100 requirements. Guaranteed for 100 washes.

3-panel gusseted free-standing microscope cover (16" W x 10" D x 22" H)
No. 265ST1354 .....**$101.60**

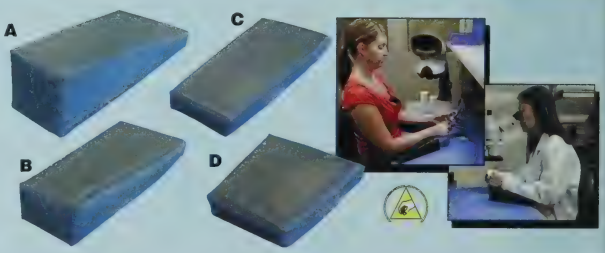
2-panel boom-arm microscope/magnifier cover (13" x 15")
No. 265ST1315 .....**$41.90**

LINDSTROM

Wedge-Ease® ESD Ergonomic Armrests

Support arms and wrists when working in awkward or unsupported positions. Eliminates discomfort, reduces fatigue. Static dissipative for ESD use. Easy-to-clean vinyl construction. Anti-slip base won't slide on bench.

3" Wedge
A. No. 844IE003 .....**$34.50**
2" Wedge
B. No. 844IE002 .....**$32.50**
1" Wedge
C. No. 844IE001 .....**$29.50**
Mini Wedge
D. No. 844IE100 .....**$26.50**



O.C. White Co.
Quality Since 1894

All Feature Glare-Free Full Spectrum Bulbs!
EXCELLENT FOR LEAD-FREE SOLDER INSPECTION!

Vision-Lite®

Features:
- Shade swivels 180°
- Sturdy, Steel construction
- 22W fluorescent light with instant-on switch
- 3-wire cord and plug (115VAC)
- **Surface Resistivity: Frame:** 1 x $10^{10}\Omega$/sq. **Glass:** 1 x $10^{7}\Omega$/sq.
- ***Lifetime Warranty***
- ***Anti-Reflective Coating****
- **Made in the USA**

Light Gray TT No.	Black TT No.	Black/Gold TT No.	Arm Reach (Inches)	Base Type	Lens Diopter	Light Gray or Black PRICE	Black/Gold PRICE
886IN7130	886IN7131	886IN7132	25	Screw-down	3-13	$389.00	$489.00
886IN7140	886IN7141	886IN7142	25	Clamp-on	3-13	$389.00	$489.00
886IN7160	886IN7161	886IN7162	25	Desk base	3-13	$489.00	$589.00
886IN7230	886IN7231	886IN7232	43	Screw-down	3-13	$389.00	$489.00
886IN7233*	886IN7234*	886IN7235*	43	Screw-down	3-13	$529.00	$529.00
886IN404	886IN406	886IN7242	43	Clamp-on	3-13	$389.00	$399.00
886IN241*	886IN7244*	886IN7245*	43	Clamp-on	3-13	$429.00	$439.00
886IN7246	886IN7247	886IN7248	43	Screw-down	4-14	$429.00	$529.00
886IN240	886IN408	886IN7249	43	Clamp-on	4-14	$429.00	$529.00

Green TT No. *(for Lead-Free Areas)*	Arm Reach (Inches)	Base Type	Lens Diopter	Lead-Free Green PRICE
886IN036	43	Clamp-on	3-13	$389.00

Magnilite® Illuminated Magnifiers

Features:
- 5" Diameter Lens
- 3 (1.75x mag.) or 5 (2.25x mag.) diopter lens
- Heavy aluminum spun shade & separate, bright white liner
- **Made in the USA**

TT No.	Arm Length	Color	Mounting Bracket	Lens Diopter	120V	PRICE
886IN739	25"	Tan	Weighted Base (11lb.)	3	120	$234.00
886IN395	25"	Tan	Weighted Base (11lb.)	5	120	$251.00
886IN521	37"	Tan	Clamp On	3	120	$209.00
886IN140	45"	Tan	Clamp On	3	120	$199.00
886IN1395	45"	Tan	Clamp On	5	120	$209.00

Halo Magnilite®

Features:
- On/Off switch
- 3-wire cord
- 3 (1.75x mag.) diopter lens
- White, translucent halo shade
- **Made in the USA**

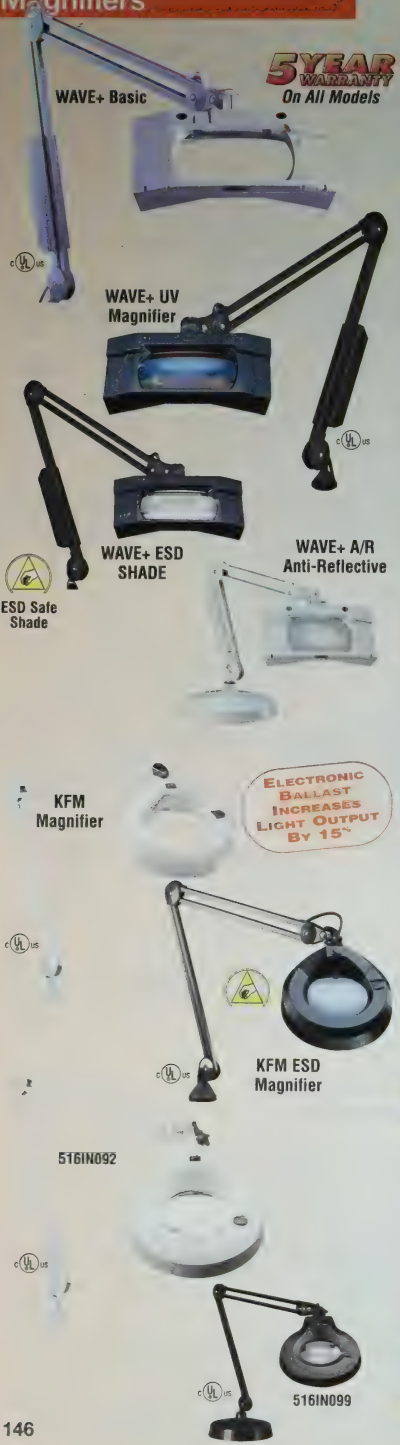
TT No.	Arm Length	Color	Mounting Bracket	Lens Diopter	PRICE
886LI138	45"	Black	Clamp On	3	$159.00
886PR738	45"	Tan	Clamp On	3	$179.00

130% more viewing area than standard magnifiers!

Big Eye™ Illuminated Magnilite®

- Exclusive 7-1/2" dia lens
- 49" sq. of viewing area
- 3 Base/Mounting Options: Lab Base, Clamp-On or Screw Down
- 3 (1.75x mag.) or 4 (2x mag.) diopter lens
- 34W bulb produces over 300 foot candles of light at typical 12" working distance
- **Surface Resistivity: Frame:** 1 x $10^{10}\Omega$/sq. **Glass:** 1 x $10^{7}\Omega$/sq.
- **Made in the USA**

TT No.	Arm Length	Color	Base/Mounting Bracket	Lens Diopter	PRICE
886IN900	–	Tan	Lab Style	4	$429.00
886IN230	43"	Tan	Screw Down	3	$289.00
886IN525	43"	Tan	Clamp On	3	$399.00
886LI400	43"	Tan	Clamp On	4	$429.00
Lead-Free Green	**Arm Reach**	**Color**	**Base/Mounting Bracket**	**Lens Diopter**	**PRICE**
886IN52400LF	43"	Green	Clamp-on	3	$289.00



5 YEAR WARRANTY On All Models

The right light

The one series of rectangular magnifiers that does it all!

WAVE+ Magnifiers

Large, 6 ¾" x 4 ½" rectangular viewing area lets you see object comfortably with both eyes. Changing the light direction produces three-dimensional and shadow-free magnification. Slim lens edge lets you maintain eye contact with the viewed object when switching from magnification to normal viewing and back again. 3/5 diopter lens (1.85x mag), up to 4.35x magnification with optional lens. Head and arm moves horizontally, vertically and laterally. (Norway)

TT No. Black	TT No. Lt. Grey	Arm Length	Mounting Bracket	Lens Diopter	PRICE
WAVE + Basic Magnifiers					
516IN845	516IN888	45"	Clamp-On	3.5	$350.00
516IN846	516IN848	30"	Clamp-On	3.5	$350.00
516IN847	516IN481	30"	Weighted Base	3.5	$410.00
WAVE + ESD Anti-Static Series Magnifiers					
Includes: Conductive paint and lens coating that dissipates static electricity. Surface Resistivity: Shade and Glass: 10^6 - $10^7\Omega$/sq; Arm: $10^{10}\Omega$/sq.					
516IN900	–	45"	Clamp-On	3.5	$530.00
516IN902	–	30"	Clamp-On	3.5	$530.00
516IN904	–	30"	Weighted Base	3.5	$590.00
WAVE + A/R Anti-Static Series Magnifiers					
Includes: Anti-reflective Lens to eliminate glare.					
516IN841	516IN855	45"	Clamp-On	3.5	$514.00
–	516IN7842	30"	Clamp-On	3.5	$514.00
516IN843	–	30"	Weighted Base	3.5	$574.00
WAVE + Plus UV Magnifier					
Includes: UV light source for inspecting conformal coatings, welds, solder points and areas of stress concentration.					
516IN915	–	45"	Clamp-on	3.5	$465.00
516IN916	–	30"	Clamp-on	3.5	$465.00
516IN917	–	30"	Weighted Base	3.5	$525.00
WAVE + Accessory Lenses – Fit all WAVE + Magnifier Series					

No. 516AC074 4-Diopter add-on lens, black.....**$55.00** **No. 516LI012** 10-Diopter swing away lens **$95.00**
No. 516AC078 8-Diopter add-on lens, black.....**$55.00** **No. 516AC205** Replacement Bulb **$15.00**

The right light

The industry standard for round lens magnifiers

KFM Magnifiers

22W fluorescent light source, 3500 lux at focal distance. Electronic ballast minimizes heat, provides flicker-free operation and generates no RFI noise. Die-cast heavy-duty aluminum housing. Patented, fully adjustable, internal spring arm offers perfect balance. Instant-on switch. ***5-Year Warranty***. (Italy/Norway)

TT No.	Arm Length	Color	Mounting Bracket	Lens Diopter	Lens Diameter	PRICE
516LI113	45"	Lt. Grey	Clamp-On	3	5"	$245.00
516LI115	45"	Lt. Grey	Clamp-On	5	5"	$255.00
516LI110	45"	Lt. Grey	Clamp-On	10	1.5"	$260.00
516LI213	30"	Lt. Grey	Clamp-On	3	5"	$245.00
516IN721	30"	Black	Clamp-On	5	5"	$255.00
516IN7210	30"	Lt. Grey	Clamp-On	10	1.5"	$260.00
516LI253	30"	Lt. Grey	Table Base	3	5"	$305.00
516LI255	30"	Black	Table Base	5	5"	$315.00

No. 516IN640 Replacement Bulb.....**$14.00**

KFM High Output Magnifiers

Generate 2.5X greater light output than any other round lens magnifiers. (Norway)

TT No. Black	TT No. Light Gray	Model	Arm Length	Mounting	Lens Diopter	Lens Diameter	PRICE
516IN091	516IN092	KH113	45"	Clamp-on	3	5"	$275.00
516IN093	516IN094	KH115	45"	Clamp-on	5	5"	$285.00
–	516IN095	KH110	45"	Clamp-on	10	1.5"	$290.00
–	516IN096	KH213	30"	Clamp-on	3	5"	$275.00
–	516IN097	KH215	30"	Clamp-on	5	5"	$285.00
–	516IN098	KH210	30"	Clamp-on	10	1.5"	$290.00
516IN099	516IN100	KH253	30"	Table Base	3	5"	$335.00
516IN101	516IN102	KH255	30"	Table Base	5	5"	$345.00
516IN103	–	KH250	30"	Table Base	10	1.5"	$350.00

Options

No. 516IN104 4-diopter lens .....**$50.00** **No. 516LI012** 10-diopter swing-away lens.....**$95.00**
No. 516IN105 8-diopter lens .....**$55.00** **No. 516IN37559** Replacement Bulb **$30.00**

KFM ESD Magnifiers

For use in static sensitive environments. (Italy/Norway)

TT No.	Arm Length	Color	Mounting Bracket	Lens Diopter	Lens Diameter	PRICE
516IN6914BK	45"	Black	Clamp-On	3	5"	$290.00
516IN6913BK	45"	Black	Clamp-On	5	5"	$300.00

The right light
LUXO

JFM Magnifiers

Medium-duty magnifiers with 22W fluorescent light source, optical quality lens, 360° shadow-free illumination. All-steel housing. Arms use calibrated external springs for balance. (Italy)

TT No.	Arm Length	Color	Mounting Bracket	Lens Diopter	Lens diameter	PRICE
516IN354	45"	Lt. Grey	Clamp-on	3	5"	$185.00
516IN355	45"	Lt. Grey	Clamp-on	5	5"	$195.00
516IN356	30"	Lt. Grey	Clamp-on	3	5"	$185.00
516IN357	30"	Lt. Grey	Clamp-on	5	5"	$195.00

IFM Magnifiers

Smart, economical choice for tight budgets. Now features stamped steel shade.
22W fluorescent light source, 360° shadow-free illumination. (China)

TT No.	Arm Length	Color	Mounting Bracket	Lens Diopter	PRICE
516IN345	45"	Lt. Grey	Clamp-On	3	$124.00
516IN346	45"	Lt. Grey	Clamp-On	5	$134.00
516IN350	30"	Lt. Grey	Clamp-On	3	$124.00
516IN352	30"	Lt. Grey	Clamp-On	5	$134.00
516IN351	30"	Lt. Grey	Weighted Base	3	$174.00
516IN353	30"	Lt. Grey	Weighted Base	5	$184.00

No. 516IN640 Replacement Bulb.....**$14.00**

New!

W
Waldmann Lighting

Omnivue Magnifier

Ideal for assembly and inspection applications. **Features:** 3 compact fluorescent (5000K) 9-watt lamps which provide 1800 lumens of light and 2 light levels: 18-watts (1200 lumens) of side-to-side lighting or 27-watts (1800 lumens) of light from the top and both sides of the magnifier; 3 diopter large stadium shaped lens provides precise positioning which eliminates unnecessary bending or slouching. **Includes:** Lens cover; Industrial-grade clamp; Spring-loaded base and middle joint allow easy light adjustment; 6' cord. 120V. (Germany)

35" Reach
No. 859IN001 .....**$382.00**
43" Reach
No. 859IN000 .....**$382.00**

35" Reach ESD
No. 859IN005 .....**$574.00**
43" Reach ESD
No. 859IN004 .....**$574.00**

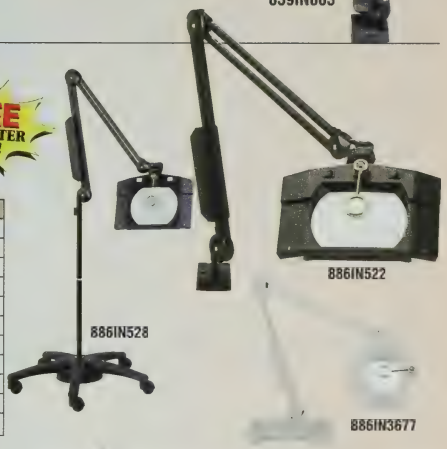
Prolite® Dual-Mag™ Magnifiers

Features:

- Dual Magnification Levels (3 - 13 or 5 - 15)
- Rectangular or Circular Viewing
- Unlimited angles of use
- Crown white, distortion-free optical quality lenses
- Made in China
- *Five-Year Warranty*

FREE 10 DIOPTER LENS!

TT No. Black	TT No. White	Base Type	Bulb Type	Lens Diopter	Viewing Area	PRICE
886IN526	886IN527	Clamp-on	13W Full Spectrum	3 - 13	7" x 5.75"	$189.00
886IN528	886IN529	Roll Around	13W Full Spectrum	3 - 13	7" x 5.75"	$259.00
886IN530	886IN539	Desk Base	13W Full Spectrum	3 - 13	7" x 5.75"	$289.00
886IN522	886IN523	Clamp-on	13W Full Spectrum	3 - 13	7.5' x 6.2"	$239.00
886IN546	886IN547	Desk Base	13W Full Spectrum	3 - 13	7.5" x 6.2"	$339.00
886IN3672	886IN3673	Clamp-on	22W Full Spectrum	3 - 13	5" DIA.	$139.00
886IN3674	886IN3675	Roll Around	22W Full Spectrum	3 - 13	5" DIA.	$209.00
886IN3676	886IN3677	Desk Base	22W Full Spectrum	3 - 13	5" DIA.	$239.00
886IN3678	886IN3679	Clamp-on	22W Full Spectrum	5 - 15	5" DIA.	$149.00
886IN3680	886IN3681	Roll Around	22W Full Spectrum	5 - 15	5" DIA.	$219.00
886IN3682	886IN3683	Desk Base	22W Full Spectrum	5 - 15	5" DIA.	$249.00



DAZOR

Ideal for quality control, inspection & assembly!

Circline Illuminated Magnifier

- 22W Circline fluorescent tube (included) for even, shadow-free light from all sides
- 3x (1.75 mag.) Diopter Lens
- Available in Gray or Black

TT No.	Arm Length	Base Type	Color	Bulb Type	Lens Diopter	PRICE
284LI202	28	Deck Base	Gray	Cool White	3	$350.00
284LI201	42	Clamp-On	Gray	Cool White	3	$297.75
284LI203	42	Clamp-On	Black	Cool White	3	$297.75

Task Lamps

O.C. White Co.
Quality Since 1894

Draftsman Lamp

Steel twin tube shade with cool white bulb on an Ultraflex™ Prolite® arm.

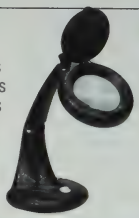
45" Arm – Clamp-On Base
No. 886IN431 .....$189.00
25" Arm – 11 lb. Weighted Base
No. 886IN1739 .....$225.00

Task Lighting

Both ESD-safe lamps feature an 8" cool vented aluminum shade that swivels; bright white inner liner to increase light; adjustable arm with knobs that lock into position. 120V. *Bulb not included.*

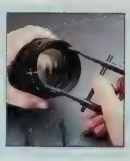
45" Arm –Clamp-On Base
No. 886IN937 .....$139.00
25" Arm – 11 lb. Weighted Base
No. 886IN217 .....$181.00

5X Magnifying Lamp



The five-power magnification offers a portable solution to viewing anything small. Cool white light renders colors perfectly and reduces eye fatigue. Pivot arm design allows positioning at various heights. Heavy metal base provides a stable, non-slip design, and the flip down cover keeps the magnifier dust-free. **Specs:** Arm Length: 7"; Base Type: Desk; Bulb Color: Cool White; Lens Diopter: 20; Glass Lens Diameter: 3-5/16".
No. 711IN001.....$37.95

Mini-Spanner Set



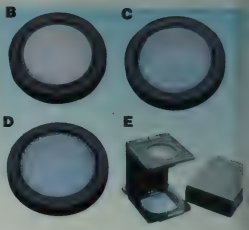
Two permanent tip spanner wrenches, each adjustable from 1/4" to 3-1/4"; machine danodized steel construction, each has two 3/16" dia. slide bars, two 3/8" dia. x 4" long arms with locking screws; permanent tips are 1/16" diameter offset pencil points on one tool and 3/16" offset straight flat on other.
No. 328WR413 .....$62.90

Hastings Triplet Measuring Magnifier

Best Seller

This 7x Hastings lens provides a flat, distortion-free image. The transparent body allows illumination to fall on the magnified area. Leather case included. *(Scales not included, see below).*
A. No. 178IN034 .....$55.20

Measuring Scales



B. General purpose scale for measuring radii from 1/16" to 3/8" in single degrees to 90°, .005" to .1mm scales, and line widths of .001", .002" and .003".
No. 178IN036 .....$31.25
C. Metric. 20mm in 0.1mm intervals.
No. 178IN040 .....$31.25
D. Inch. 3/4" in 0.005" intervals.
No. 178IN038 .....$31.25
E. Protractor. 360° in single degrees.
No. 178IN439 .....$31.25

Bausch & Lomb

Hastings Triplet

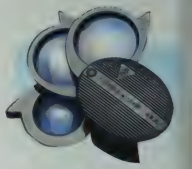
Highly-corrected magnifiers. Three separate lenses, bonded together to form a compound lens, provide sharp, very distinct images. No color distortion even under 14-20x power. A swing-away, nickel-plated case protects lens and serves as a handle.

TT No.	Focus	Power	PRICE
178IN128	1-1/2"	7x	$35.20
178IN130	1"	10x	$36.75

TT No.	Focus	Power	PRICE
178IN132	3/4"	14x	$43.40
178IN134	1/2"	20x	$43.40

Bausch & Lomb

Folding Pocket Magnifiers



Wide range of powers; 3-20x. By combining lenses, three powers available with 2-lens models, seven different powers with the 3-lens model. The swing-away case also serves as a handle.

1 Lens; Dia.: 36mm; Powers: 4x
No. 178IN016 .....$13.15
2 Lens; Dia.: 37mm; Powers: 3x-7x
No. 178IN018 .....$18.75
2 Lens; Dia.: 23mm; Powers: 4x-9x
No. 178IN020 .....$18.55
2 Lens; Dia.: 20.3mm; Powers: 5x-12x
No. 178IN022 .....$18.55
3 Lens; Dia.: 20.3mm, 15.2mm; Powers: 5x-20x
No. 178IN024 .....$22.60

Safety Eyewear

Safety Glasses

Comfortable wrap-around style safety glasses have 5-position, ratchet-action temples as well as non-slip rubber head grips that create a customized fit. Lens is constructed of lightweight, scratch-resistant polycarbonate that provides 99.9% UV protection. Black frame. **(USA)**

Storm® Safety Glasses Clear
Use for protection from impact in all types of manufacturing and construction environments.
A. No. 278IE110 .....$4.45/each

Tomahawk® Safety Glasses Black Frame, Clear
B. No. 278IE001 .....$2.34/each

Tomahawk® Safety Glasses Red/White/Blue Frame, Clear
C. No. 278IE003 .....$2.60/each

CROSSFIRE SAFETY EYEWEAR

New!

Safety Eyewear

Comfortable frames with a snug and comfortable fit. Frames and lens cavities designed for superior peripheral vision. Nosepieces comfortable, non-slip, breathable, and hypo-allergenic material. Lenses are polarized, UV protectant with impact resistance exceeding ANSI Z87.1-2003 standards.

	TT No.	Frame	Lens	PRICE
	869IE9614	Shiny black	Smoke HD polarized	$37.00
A	869IE9215	Matte black	Indoor Outdoor	$8.00
B	869IE1024	Matte black	Clear	$7.40
C	869IE124	Matte black	Clear, 1.5 diopter	$7.30
	869IE125	Matte black	Clear, 2.0 diopter	$7.30
	869IE126	Matte black	Clear, 2.5 diopter	$7.30
	869IE1021	Matte black	Smoke	$7.40
	869IE117	Crystal brown	HD Brown/Flask Mirror	$8.00

Bausch&Lomb

Lenscope™ 7x -10x Power

Fits in the palm of your hand. Two illumination lamps, 45° or 90° from the viewing angle; uses two AA batteries (not included). Ergonomic plastic body fits easily in a pocket. Hinged-top storage case included. Order scales separately.

Power: 10x; Focal Dist.: 1"; Lens Size: 15.9mm
No. 178IN142 .....**$52.40**

Power: 7x; Focal Dist.: 1.5"; Lens Size: 19.8mm
No. 178IN143 .....**$52.40**

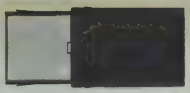
Bausch&Lomb *Get Edge-to-Edge Sharpness For Inspection!*

Folding Lighted Magnifier

This 2" x 4" illuminated magnifier has a 2x magnification lens that gives you edge-to-edge sharpness for quality control and inspection. The unit has a unique swing-open handle and case. Batteries included.
No. 178IN090 .....**$19.65**

Use in Low Light Environments

Compact Light Magnifier



For your tool box, bench-top or desk, you'll have illuminated magnification at the touch of a button. A 2", 2x magnification lens retracts and stores in its own protective case. Two *AAA* batteries included.
No. 298IN0121.....**$8.20**

Magnifiers

Round handheld magnifier with glass lens and ergonomic handle. 3x magnification. 5.90" OAL.
No. 711IN238.....**$2.00**

Folding illuminated magnifier. 8x magnification, LED light. Includes 3 LR1130 batteries and mini screwdriver for replacing battery.
No. 711IN239.....**$7.10**

Magna-Lites

Light beam illuminates magnified areas. 5x, 1-1/4" square lightweight acrylic lens, with on-off switch. *(Batteries Included)*
No. 534IN010.....**$9.90**

Same as 534IN010 w/twice the magnification.
No. 534IN012.....**$17.90**

TECHNI-TOOL

Magnifier

3-1/4" diameter lighted acrylic lens magnifier gives you sharp edge-to-edge 2X magnification with a 4X insert for detailed inspection. 9" OAL (China)
No. 758IN002 .....**$20.00**

TECHNI-TOOL

Handheld 30x Microscope

Sharp, brilliant vision with wide field-of-view and 30x magnification. Unique built-in light and easy focusing systems. Uses two standard 1.5V batteries.
No. 758IN005 .....**$76.31**

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.
We reserve the right to correct misprints.

New!

Headband Binocular System

Precision binocular headband magnifier which permits unrestricted efficiency while reducing eye strain, leaves both hands free, and allows three dimensional vision. Used by anyone who requires close accurate work. **OptiVISOR** is used without prescription or safety while OptiSIGHT can be worn over prescription or safety eyeglasses. **OptiSIGHT** includes three different lens plates that are simple to change - 3X, 4X and 5X magnification. **VisorLIGHT** is a battery powered light that attached to the visor. Two models are available to allow complete mounting: LT-42 with a 42" long cord so the battery pack can be worn on a belt or placed in a pocket and LT-06 with a 10" cord for mounting on a headband. Operates on two AA batteries (not included)

OptiLOUPE Visor system includes the OptiVISOR plus six interchangeable optical glass prismatic lenses for 1-1/2 to 3-1/2 magnification, and a moveable loupe adds 2-1/2x magnification for close-up inspections and can be attached to either side. The laser spot Xenon lamp VisorLIGHT is also included. Entire system provided in impact-resistant storage box.

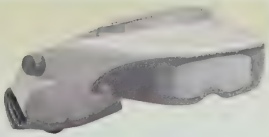
Visor Features:

- Glass Prismatic Lenses - Ground and polished to precision optical standards - bevel edged and mounted in interchangeable plastic frame
- It Tilts - Adjustable pivots allow the visor to be tilted out of the way when not needed and at your fingertips when you need magnification
- Adjustable Headband - Conforms to fit all head sizes - fabricated from a special blend lightweight material - comfortable when worn for long periods of time
- High Impact Visor - Provides a tough, durable, always new appearance
- Genuine Leather Comfort Band- Padded with orthopedic felt adds to comfort

TT No	Visor Description	Focal Length	Magnification	PRICE
298IN076	OptiVisor	14 Inch	1.75x Power	$40.80
298IN026	Replacement Lens Plate	14 Inch	1.75x Power	$25.90
298IN078	OptiVisor	10 Inch	2.00x Power	$40.80
298IN028	Replacement Lens Plate	10 Inch	2.00x Power	$25.90
298IN080	OptiVisor	8 Inch	2.50x Power	$42.50
298IN030	Replacement Lens Plate	8 Inch	2.50x Power	$24.60
298IN082	OptiVisor	6 Inch	2.75x Power	$42.15
298IN060	Replacement Lens Plate	6 Inch	2.75x Power	$27.30
298IN072	OptiVisor	4 Inch	2.50x Power	$44.00
298IN010	Replacement Lens Plate	4 Inch	2.50x Power	$25.90
298IN200	OptiSight			$26.15
298IN084	OptiLOUPE (Loupe Only)		6.00x Power	$9.50
298IN006	OptiLIGHT LT06			$23.15
298IN422	OptiLIGHT LT42			$22.20
298IN2204	OptiLIGHT Replacement Bulb			$6.10
298IN1001	OptiLOUPE Visor System	20 Inch	1.50X Power	$240.85
	14 Inch	1.75x Power		
	10 Inch	2.00x Power		
	8 Inch	2.50x Power		
	6 Inch	2.75x Power		
	4 Inch	3.50x Power		

Bausch&Lomb

Magna Visor



Padded frame with a removable, washable fabric. Molded for long wearing comfort. Acrylic lenses. Visor with three lenses: 6", 2.6x Power, 10.4 Diopter; 8", 2.2x Power, 8.8 Diopter; 12", 1.8x Power, 7.2 Diopter. (China)
No. 178IN4200 .....**$35.05**

Bausch & Lomb

Inspection Eye Loupes

Optical-quality glass lens. Considered the standard in the industry for many years. For work on highly polished surfaces. Reduces glare and increases contrast for better details using lenses. Lightweight. Rests comfortably in the eye socket.

Focal Distance: 1"; Power: 10x; Lens Dia.: 1
No. 178IN082 .....**$12.25**

Focal Distance: 1-1/2"; Power: 7x; Lens Dia.: 1
No. 178IN084 .....**$10.35**

Focal Distance: 2"; Power: 5x; Lens Dia.: 1
No. 178IN086 .....**$10.35**

Focal Distance: 2-1/2"; Power: 4x; Lens Dia.: 1
No. 178IN088 .....**$10.35**

Double Lens Models

Focal Distance: 1-1/4", 1/2", 1/2"; Power: 8x, 13x, 17x; Lens Dia.: 1, 1/2
No. 178IN054 .....**$23.65**

Focal Distance: 2-1/2", 1-1/2", 1-1/4"; Power: 4x, 5x, 8x; Lens Dia.: 1, 1/2
No. 178IN050 .....**$20.95**

Bausch & Lomb

A necessity for detailed work!

Classic Metal™ Eyeglass Loupes

Made with precision optical glass. Lightweight, fully adjustable up to 360°. Mounts easily to either side of eyeglasses or safety eyewear. Includes one side shield adapter; one wraparound adapter; three adhesive pads and high quality case.

3x; 12 diopters
No. 178IN017 .....**$27.25**

4x; 16 diopters
No. 178IN721 .....**$27.25**

5x; 20 diopters
No. 178IN137 .....**$27.25**

7x; 28 diopters
No. 178IN147 .....**$27.25**

4-7x (4x and 4x); 16 diopters and 28 diopters
No. 178IN178 .....**$35.05**

3-5x (3x and 3x); 12 diopters and 20 diopters
No. 178IN179 .....**$35.05**

Optical Cleaners & Wipes

TECHNI-TOOL

Streak Free Screen Cleaner

New!

Ideal for:
- Test Equipment Screens
- Camera Screens
- Computer Screens
- TV Screens
- Much More

The screen cleaner removes grease marks, dirt and more from instrument displays and other electronic screens without streaking. Alcohol and ammonia-free formula safely cleans valuable equipment. Convenient pump spray bottle and microfiber cloth is all that's needed.

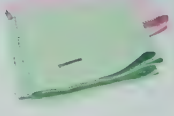
Screen Cleaner, 4 fl. oz. bottle
No. 758CH474 .....**$3.75**

Microfiber Screen Cleaning Cloths, 10" x 10" – 5/pk.
No. 758CH465 .....**$4.75**

Screen Cleaner Kit – Includes: 4 fl. oz. bottle of Screen Cleaner and a five pack of the Microfiber Screen Cleaner Cloths.
No. 758CH453 .....**$7.65**

TECHNI-STAT

Reusable Microfiber Cleaning Cloth



Safely and effectively wipes contamination, dirt and finger oil from a variety of coated and non-coated optical surfaces, including CD's, lasers, lenses and glasses, without the use of any chemical. Absorbs twice its weight in water, and will not shrink after laundering. (Korea) **11" x 12" – 5pk.**

No. 758ST528 Pink ....**$18.25 5/Pk.** **No. 758ST530** Green ..**$18.25 5/Pk.**

TECHSPRAY

Screen Cleaner

New!

Cleans sensitive surfaces including non-glare LCD and plasma screens. Gel formula will not run down into equipment. Alcohol and ammonia free. Will not scratch or streak. **6 oz. pump spray**
No. 754CH605 .....**$4.21**

LCD & Plasma Screen Cleaning Wipes

Soft, low linting microfiber terry cloth. Use wet or dry. Washable. 16" x 16" with hemmed edges. **2/pk.**
No. 754CH682 .....**$6.11**

TechClean Wipes

New!

Hydroentangled cellulose/polyester wipe. High absorbency, durable wet or dry. Lint-free.
12" x 12", 50/pk.
No. 754CH450 .....**$8.13**
9" x 9" C-fold wipes, 100/pk.
No. 754UN350 .....**$21.35**

MicroCare

Precision Optical Cleaner

High-purity plastic-safe solvent designed for cleaning critical optical devices, including plastic fiber optic cables, all lenses, mirrors, inspection scopes, microscopes, camera lenses and more. Electrically conductive. TravelSAFE package.

3 oz./85g Mini-Pump Triton Dispensing Top
No. 565CH037 .....**$15.00**

Chemtronics

Optic Prep®

The highest quality premoistened lens-grade tissue for cleaning optical surfaces. Evaporates completely, leaves no residue. Compatible with most plastics, glass and metals. Mild non-abrasive solvent which quickly removes dust, oils, & contaminants. 4" x 3" wipers. **50 pads/box.**
No. 237CH410 .....**$24.02**

Screen Prep®

Easy-to-use cleaner and static control system for monitor screens. Controls static-generated contamination. Safely removes dust, dirt and oils. 3" x 4". **25 twin packs.**
No. 237CH020 .....**$28.35**

Opticwipes™

Soft, laboratory grade cellulose paper designed for use on optical lenses and surfaces. Opticwipes™ are non-contaminating, lint free and solvent resistant. Double bagged. 9" x 9", **500 wipes per bag.**
No. 237UN014 .....**$42.81**

Bausch & Lomb

Sight Savers® Lens Cleaning Tissues

These anti-fog, anti-static pre-moistened lens cleaning tissues are perfect for the lab, office or in the field. Individually packed, each package contains a large 5" x 8" tissue treated with special surfactants. 100 wipes per dispenser box. **(USA)**
No. 178CH8574.....**$11.60/Box**

TECHNI-STAT

Solid Vinyl Dissipative Workstation Mat

Dissipative solid vinyl material. Three-layer formation. Static decay time: <0.05 seconds. Allows workers to handle highly-sensitive equipment and components without transmitting harmful static electricity. **Specs:** RTT: 5.3 x 10^7 x 6 x $10^7\Omega$/sq.; RTG: 5.3 x 10^7 to 5 x $10^8\Omega$/sq.; Thickness: .090". **Includes:** 3/8" snap and 10' ground Cord. **(USA)**

COMPARE AND SAVE! You'll See We're Less

Mats:

2' Wide x 3' Long
- **No. 758ST5123** Blue $60.34
- **No. 758ST5323** Brown $60.34
- **No. 758ST5223** Beige $60.34

2' Wide x 4' Long
- **No. 758ST5124** Blue $81.03
- **No. 758ST5324** Brown $81.03
- **No. 758ST5224** Beige $81.03

2-1/2' Wide x 4' Long
- **No. 758ST5130** Blue $98.27
- **No. 758ST5330** Brown $98.27
- **No. 758ST1324** Beige $98.27

2' Wide x 5' Long
- **No. 758ST2150** Blue $98.27
- **No. 758ST5325** Brown $98.27
- **No. 758ST5225** Beige $98.27

Rolls:
(ground cord and snap sold separately)

2' Wide x 50' Long
- **No. 758ST5125** Blue $577.57
- **No. 758ST3250** Brown $577.57
- **No. 758ST2250** Beige $577.57

30" Wide x 50' Long
- **No. 758ST1305** Blue $682.74
- **No. 758ST1533** Brown $682.74
- **No. 758ST523** Beige $682.74

3' Wide x 50' Long
- **No. 758ST513** Blue $818.95

4' Wide x 50' Long
- **No. 758ST1450** Blue $1,112.04
- **No. 758ST5534** Brown ..$1,112.04
- **No. 758ST5245** Beige $1,112.04

TECHNI-STAT

Technical Operator Vinyl Pad

Static dissipative, vinyl table pad provides comfort and the best electricals of any work pad. Use over hard laminate. Provides excellent cushioning and a static safe station. **Specs:** RTT: 3.4 x $10^9\Omega$/sq.; RTG: 4.5 x $10^9\Omega$/sq.; Thickness: 1/4". (No Snap) **(USA)**

- **No. 758ST248** 18"W x 23"D x 1/4"T $24.14
- **No. 758ST420** 2' x 40' roll $479.30

3M

1860 Series Conductive Mats

Removes static charge from personnel as they approach work areas. **Specs:** RTT; 6 x $10^2\Omega$/sq.; RTG: 9 x $10^2\Omega$/sq.; Thickness: 1/8". Color: Black. **(USA)**

1864 Floor Mat

Includes: (2) 10mm snap fasteners (installed) and (1) 15' ground cord with a 1MΩ resistor. 1/8" thick. Black.

- **No. 105ST1864** 4' x 6' $299.68
- **No. 105ST864** 4' x 8' $390.72
- **No. 780ST1865** 2' x 50' $1,124.40

MILLER

Softy® Anti-Static Work Mats

Specially designed cushioned surface to protect delicate assemblies and make small parts handling easier and quicker. Ideal for clean rooms, laboratories, and electronic component assembly lines. Non-slip backing. **Specs:** RTT: 10^{10} to $10^7\Omega$/sq.; Thickness: .062". (snap not included) **(USA)**

- **No. 680IE6180** 11" x 14" $4.98
- **No. 680IE6183** 14" x 22" $5.69

Non-Anti-Static (Black)
- **No. 680IE6154** 14" x 22" $5.63

spiwestek

Clean Room Admissible!

NVMT Series Static Dissipative Work Surface Laminate

Controls static electric charges without voltage suppression ambiguity. Homogeneously blended, balanced ply construction. Laminates have a micro thin layer of aluminum oxide, creating an extremely hard protective layer, which provides long term resistance to surface abrasion. **Specs**: Surface Resistivity: 10^6 - $10^9\Omega$/sq: 5000V to 500V in <0.05 second; Thickness: .060". **Includes:** 3/8" (10mm). (Additional shipping rates apply) **(USA)**

2'W x 4'L
- **No. 691ST0001** Blue $149.25
- **No. 691ST0002** Beige $149.25
- **No. 691ST0003** Off white $149.25
- **No. 691ST0004** Gray $149.25
- **No. 691ST0005** Almond $149.25

3'W x 5'L
- **No. 691ST0006** Blue $233.85
- **No. 691ST0007** Beige $233.85
- **No. 691ST0008** Off white $166.50
- **No. 691ST0009** Gray $233.85
- **No. 691ST0010** Almond $233.85

3'W x 6'L
- **No. 691ST0011** Blue $270.20
- **No. 691ST0012** Beige $270.20
- **No. 691ST0014** Gray $270.20
- **No. 691ST0015** Almond $270.20

Almond

3M

3M 8300 Series Dissipative Rigid Work Surfaces

Manufactured with 3M 8300 static dissipative hard laminate. Non-glare surface resists staining, scorching and common solvents. **Specs:** Thickness: 1/8", RTG: 10^6 to $10^9\Omega$/sq., Abrasion resistance: 1800 cycles on wear test NEMA #LD-3-3.01. **Includes:** (2) 3/8" (10mm) snap fasteners installed, (1) 3048 ground system. **(USA)**

24" x 36"
- **No. 105ST343** Beige.....$194.83
- **No. 105ST8344** Gray $194.83

24" x 48"
- **No. 780ST8350** Beige $245.60
- **No. 780ST354** Gray $245.58

3M

Stay-In-Place Matting Tape

Limits the movement of industrial matting. For use in dry manufacturing areas on carpet or smooth flooring. Not intended for areas with frequent heavy cart or motorized equipment, areas that may get wet. **Specs:** 200 Tape - Material: Low density polyethylene (LDPE); Thickness: .035"; 140 and 130 Tape - Thickness: .038".

3M 140 Tape - For use on looped pile carpeted floors
- **No. 105ST2664** 2" x 10' $28.00
- **No. 105ST2665** 2" x 40' $100.30

3M 130 Tape - For use on hard, smooth floors
- **No. 105ST2662** 2" x 10' $28.00

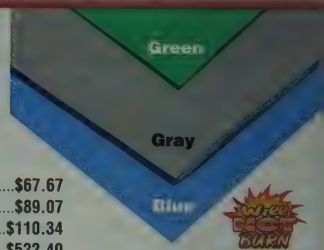
2 Layer Mats

TECHNI-STAT

2-Layer Premium Rubber Dissipative Mats

New THICKER MAT!

Mats resist chemicals and won't burn. Exceed EOS/ESE and Department of Defense standards. **Specs:** RTT: 5.8 X $10^7\Omega$/sq.; RTG: 5.2 x $10^7\Omega$/sq.; Thickness: .080 (table). Includes: 3/8" snap and 10' ground cord. (Excluding rolls) New green for lead-free areas. **(USA)**



WILL NOT BURN

RoHS Compliant

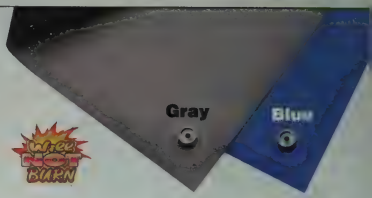
Blue Mats	W x L		Gray Mats	W x L		Green Mats	W x L	
No. 758ST6523	2' x 3'	$67.15	No. 758ST6623	2' x 3'	$67.15	No. 758ST2823	2' x 3'	$67.67
No. 758ST6524	2' x 4'	$87.84	No. 758ST6624	2' x 4'	$87.84	No. 758ST2824	2' x 4'	$89.07
No. 758ST6525	2' x 5'	$108.62	No. 758ST6625	2' x 5'	$108.62	No. 758ST2825	2' x 5'	$110.34
No. 758ST65240	2' x 40'	$515.51	No. 758ST66240	2' x 40'	$515.51	No. 758ST8240	2' x 40'	$522.40
No. 758ST5304	30" x 40'	$643.09	No. 758ST6304	30" x 40'	$643.09	No. 758ST3040	30" x 40'	$653.43
No. 758ST5340	3' x 40'	$774.12	No. 758ST6340	3' x 40'	$774.12	No. 758ST8340	3' x 40'	$784.12

TECHNI-STAT

Best Seller

2-Layer Dissipative Rubber Mat

Features a textured blue static dissipative side (top) and a black conductive side (bottom) – creating a burn resistant static dissipative work surface. **Specs:** RTT: 5.8 x $10^7\Omega$/sq.; RTG: 5.2 x $10^7\Omega$/sq.; Thickness: .060". **Includes:** 3/8" female snap and 10' ground cord. (Excluding rolls) **(USA)**



WILL NOT BURN

Blue Mats	W x L		Gray Mats	W x L		Blue Rolls	W x L		Gray Rolls	W x L	
No. 758ST6123	24" x 36"	$58.77	No. 758ST6424	24" x 48"	$73.88	No. 758ST612	24" x 50'	$551.71	No. 758ST642	24" x 50'	$534.47
No. 758ST6124	24" x 48"	$73.88	No. 758ST6425	24" x 60"	$92.43	No. 758ST613	30" x 50'	$689.64	No. 758ST6430	30" x 50'	$668.09
No. 758ST6125	24" x 60"	$92.43	No. 758ST6446	30" x 48"	$92.43	No. 758ST6135	36" x 50'	$836.19	No. 758ST6453	36" x 50'	$801.71
No. 758ST6103	30" x 48"	$92.43	No. 758ST6434	36" x 48"	$98.03						
No. 758ST6134	36" x 48"	$98.03									

3 Layer Mats

TECHNI-STAT

Best Seller

3-Layer Vinyl Dissipative Mats

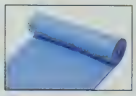
Unique design combines the electricals and comfort that only a foam back material can provide. Has been tested and approved by major electronics manufacturers. Protects components, yet is hard enough to resist tearing and scuffing. **Specs:** RTT: 6 x $10^7\Omega$/sq.; RTG: 3 x $10^7\Omega$/sq.; Thickness: .120". **Includes:** 3/8" snap and 10' ground cord. (Excluding rolls) **(USA)**

Blue Mats	W x L		Gray Mats	W x L		Blue Rolls	W x L		Gray Rolls	W x L	
No. 758ST4123	2' x 3'	$55.17	No. 758ST4623	2' x 3'	$56.90	No. 758ST412	2' x 40'	$437.92	No. 758ST4136	30" x 50'	$751.71
No. 758ST4124	2' x 4'	$62.38	No. 758ST4624	2' x 4'	$75.86	No. 758ST4130	30" x 40'	$548.26	No. 758ST6355	3' x 50'	$855.33
No. 758ST413	30" x 4'	$77.95	No. 758ST4630	30" x 4'	$94.83	No. 758ST4134	3' x 40'	$672.40	No. 758ST4645	4' x 50'	$1,062.05
No. 758ST4125	2' x 5'	$77.95	No. 758ST4625	2' x 5'	$94.83	No. 758ST4144	4' x 40'	$860.33			
No. 758ST4126	2' x 6'	$108.62	No. 758ST4626	2' x 6'	$112.07						
No. 758ST4146	4' x 6'	$230.32									

TECHNI-STAT

Energy Absorbing 3-Layer Vinyl Vibration Mat

High quality type "O" energy-absorbing static-safe 3-layer rolls. This 3/8" thick disk drive mat cushions equipment against vibration and shock on benches, cart, tray or shelves. Soft vinyl foam can be hard cut or die cut. Meets ANSI/ESD, EIA-625 and S20.20 ESD standards. **Specs:** RTT: 10^6 to $10^8\Omega$/sq; RTG: 10^6 to $10^8\Omega$/sq; Thickness: 3/8". (Does not include grounding hardware).



Blue Rolls	W x L	
No. 758ST5430	30" x 60'	$1,249.97
No. 758ST5436	3' x 60'	$1,422.38

TECHNI-STAT

3-Layer Vinyl Dissipative Rolls

Extremely durable with heavy vinyl surface and conductive center. **Specs:** Resistivity: 10^7 to $10^8\Omega$/sq.; Thickness: .125". (Snap not included) **(USA)**

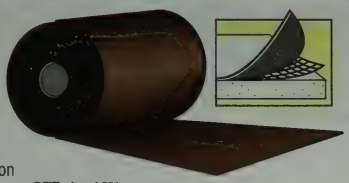
Blue Rolls	W x L		Gray Rolls	W x L	
No. 758ST2955	2' x 50'	$609.50	No. 758ST2956	2' x 50'	$609.50
No. 758ST2961	30" x 50'	$898.06	No. 758ST2962	30" x 50'	$898.06
No. 758ST2951	3' x 50'	$980.50	No. 758ST2952	3' x 50'	$980.50
No. 758ST2963	4' x 50'	$1,219.00	No. 758ST2964	4' x 50'	$1,219.00
No. 758ST2953	2' x 100'	$1,312.50	No. 758ST2954	2' x 100'	$1,050.00
No. 758ST2959	30" x 100'	$1,956.85	No. 758ST2960	30" x 100'	$1,595.00
No. 758ST2957	3' x 100'	$2,118.75	No. 758ST2958	3' x 100'	$1,695.00
No. 758ST2965	4' x 100'	$2,110.00	No. 758ST2966	4' x 100'	$2,110.00

3 Layer Mats

3M

3M 8200 Series Dissipative Vinyl 3-Layer Mats and Runners

Best Seller



Unique three-layer construction. Durable dissipative vinyl top layer. Beneath is highly conductive scrim that provides main discharge path to ground. Bottom layer is static dissipative foam backing nonskid cushion that helps prevent bypassing of conductive layers. **Specs:** RTT: 4 x 10^7/sq.; RTG: 1 x $10^7\Omega$/sq.; Thickness: .138". *(Wrist strap purchased separately.)* **(USA)**

Table Mats 2' x 4'
Includes: (1) 3/8" (10mm) snap fasteners (installed) and (1) 10' grounding cord.

No. 105ST8211 Brown (8211) **$67.15**
No. 780ST8213 Gray (8213) **$57.97**
No. 780ST8214 Blue (8214) **$57.97**

Floor Mats 4' x 6'
Includes: (1) 10' ground cord and (1) 3/8" (10mm) female snap fasteners (installed).

No. 780ST8201 Brown (8201) **$155.10**
No. 780ST8203 Gray (8203) **$155.10**
No. 780ST8204 Blue (8204) **$155.10**

Floor Runner 4' x 24'
Includes: (2) 15' Ground cords and (2) 3/8" (10mm) snap fasteners. (To be installed by user.)

No. 105ST251 Brown (8251) **$564.25**
No. 105ST8253 Gray (8253) **$563.75**
No. 105ST254 Blue (8254) **$546.25**

Brown | Gray | Blue

Floor Runner 2' x 24'
Includes: (2) 15' Ground cords and (2) 3/8" (10mm) snap fasteners. (To be installed by user.)

No. 105ST8261 Brown (8261).....**$260.07**
No. 105ST8263 Gray (8263) **$294.50**
No. 105ST8264 Blue (8264) **$260.07**

Floor Runner 2' x 40'

No. 105ST8281 Brown (8281) **$453.88**
No. 105ST8283 Gray (8283).....**$453.88**
No. 105ST8284 Blue (8284) **$384.96**

Floor Runner 4' x 40'

No. 105ST8291 Brown (8291) **$813.63**
No. 105ST8293 Gray (8293).....**$813.65**
No. 105ST8294 Blue (8294) **$813.63**

3M

3M 8800 Series Dissipative Rubber Mats & Runners

Features static-dissipative laminated Nitrile™ rubber top and bottom layers. **Specs:** RTT: 1 x 10^6 to 1 x $10^7\Omega$/sq., RTG: 1 x 10^6 to 5 x $10^6\Omega$/sq. Thickness: .065". **Includes:** (1) 15' ground cord (Techni-Tool Part No. 780ST3048) and (2) 10mm snap fasteners (Techni-Tool Part No. 780ST3034) to be installed by end user. **(USA)**

Gray | Blue

Table Mat 2' x 4'
Includes: (2) Snap fasteners (installed) and (1) Wrist strap grounding system.

No. 105ST204 Gray (8810) **$65.29**
No. 105ST811 Blue (8811) **$65.29**

Table Mat 3' x 4'
Includes: (2) Snap fasteners (installed) and (1) Wrist strap grounding system.

No. 105ST830 Gray (8830).....**$121.05**
No. 105ST832 Blue (8831) **$121.05**

Floor Mat 4' x 6'
Includes: (1) 15' Ground cord and (2) Snap fasteners (installed).

No. 105ST870 Gray (8870) **$176.82**
No. 105ST8871 Blue (8871) **$176.82**

Table Runner 2' x 24'
Includes: (2) 15' Ground cords and (5) Snap fasteners.

No. 105ST840 Gray (8840).....**$343.33**
No. 105ST841 Blue (8841) **$350.75**

Runner 3' x 24'
Includes: (2) Snap fasteners (installed) and (1) Wrist strap grounding system.

No. 105ST860 Gray (8860) **$705.09**
No. 105ST861 Blue (8861) **$616.97**

Anti-Fatigue Mats

3M

9900 Series Static Control Anti-fatigue Mat

9900 Series mats bring new comfort to anyone who stands for long periods. Durable cushioning provides a stable surface supported by rubber cells that soften in response to pressure. Specs: Surface-to-ground snap resistance: <1 x $10^6\Omega$; Surface-to-ground resistance: <2 x $10^6\Omega$; Thickness: 0.625" with beveled edge; Black.

No. 105ST9900 3' x 5' **$385.22**
No. 105ST9910 3' x Custom length .....**$92.80/Ft.**
No. 105ST9920 22" Octagonal shape **$127.72**

Anti-Fatigue Mats

TECHNI-STAT

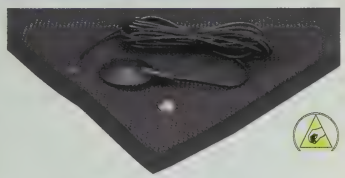
Anti-Fatigue Vinyl/Rubber Floor Mat

Best Seller

Has springiness and incredible rebound not found in other mats of its type. This static dissipative anti-fatigue floor mat is three times more resilient than ordinary vinyl sponge. 2' x 3' and 3' x 5' mats have beveled edges on all sides. **Specs:** RTT: 1 x 10^7 to 6 x $10^8\Omega$/sq.; RTG: 1 x 10^6 to 5 x $10^8\Omega$/sq.; Thickness: 3/8"; Texture: pebble; Gray. **Includes:** 3/8" (10mm) female snap and 10' ground cord. (Excluding rolls) **(USA)**

No. 758ST702 2' x 3' **$52.50**
No. 758ST703 3' x 5' **$103.10**
No. 758ST705 4' x 60' **$1,189.63**

TECHNI-STAT

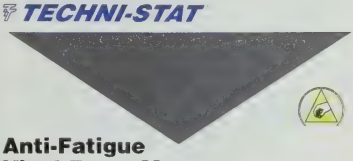


Conductive Sponge Rubber Foam Floor Mat

Provide more comfortable flooring for your workers; reduce leg strain and fatigue for increased productivity. Black slip and soil resistant sponge rubber. **Specs:** RTT: 3 x 10^5 to < $10^6\Omega$/sq.; RTG: 2 x 10^5 to < $10^6\Omega$/sq.; Thickness: 5/8; Black. **Includes:** 3/8" (10mm) female snap and 10' ground cord. **(USA)**

No. 758ST3500 3' x 5'.....**$405.16**
No. 758ST3600 3' x 6'.....**$424.13**

TECHNI-STAT



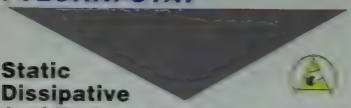
Anti-Fatigue Vinyl Foam Mat

This vinyl foam-based anti-fatigue mat quickly drains static electricity from a standing worker. Extremely durable, great for high traffic areas. Textured, slip-resistant surface. The 3' x 5' mats have tapered edges on all sides. **Specs:** RTT: <$10^{10}\Omega$/sq.; RTG: <$10^{10}\Omega$/sq.; Thickness: 3/8"; Texture: Pebble embossed; Color: Gray. **Includes:** 3/8" (10mm) snap installed (3' x 5' mats only) and a 10' ground cord. (Excluding rolls) **(USA)**

No. 758ST560 3' x 5' Mat **$83.02**
No. 758ST062 3' x 60' Roll.....**$851.71**

Anti-Fatigue Mats

TECHNI-STAT

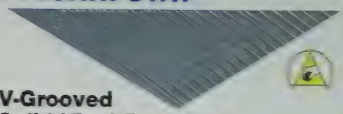


Static Dissipative Anti-Fatigue Floor Mat

Drains static electricity from workers before it disrupts sensitive equipment. Relieves employee fatigue. Sponge base reduces stress on the spine and lower back muscles caused by static body position. **Specs:** RTT: 1 X 10^6- /sq.; RTG: 1 x 10^6- /sq.; Thickness: 1/2"; Gray. **Includes:** 3/8" (10mm) female snap and a 10' ground cord. **(USA)**

No. 758ST791 60" x 36" **$132.76**

TECHNI-STAT

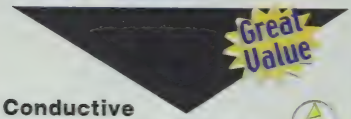


V-Grooved Solid Vinyl Floor Mat

These vinyl floor mats provide comfort and the best electricals of any anti-fatigue mat. V-groove pattern creates a non-slip floor area. **Specs:** RTT: <10^9- /sq.; RTG: <10^9- /sq.; Thickness: 1/8"; Gray. **Includes:** 3/8" (10mm) female snap and 10' ground cord. (Excluding rolls) **(USA)**

No. 758ST535 3' x 5' mat **$99.52**
No. 758ST068 3' x 60' roll.....**$858.60**
No. 758ST070 4' x 60' roll **$1,131.01**

TECHNI-STAT

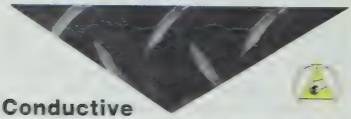


Conductive Smooth Top Vinyl Mat

This mat provides a static safe anti-fatigue work area. Top surface is durable soil resistant solid vinyl with soft foam backing. **Specs:** RTT: 10^6 x 10^9- /sq.; RTG: 10^6 x 10^9- /sq.; Thickness: 1/2"; Black. **Includes:** 3/8" (10mm) female snap and 10' ground cord. (Excluding rolls) **(USA)**

No. 758ST572 2' x 3' Mat **$113.79**
No. 758ST537 3' x 5' Mat **$227.58**
No. 758ST7323 3' x 25' Roll.....**$1,205.15**

TECHNI-STAT



Conductive Diamond Plate Top Vinyl Mat

Safely disperses static electricity away from sensitive equipment the moment you step on it. 5/32" thick electrically conductive diamond plate surface with a resilient sponge base. **Specs:** RTT: 10^6 - 10^9- /sq.; RTG: 10^6 - $10^9\Omega$/sq.; Thickness: 9/16"; Black. **Includes:** 3/8" (10mm) female snap and 10' ground cord. (Excluding rolls) **(USA)**

No. 758ST402 2' x 3' **$110.95**
No. 758ST403 3' x 5' **$241.29**
No. 758ST4032 3' x 25' **$1,146.53**

Pro-Tech Ortho Mat® Orthopedic Conductive Mat

Very soft and durable Nitrile ESD mat. Sponge rubber mat is conductive for a rapid discharge to the ground. Ergonomically designed to reduce strain from standing on hard surfaces while grounding static electricity. Sponge rubber material stands up to abrasion, oil, grease, and most common solvents. **Specs:** Resistivity: 5 x 10^6- /sq.; Charge Decay: 500V to 100V: Thickness: 5/8"; Black. **Includes:** 3/8" male snap. **(USA)**

No. 669ST223 22" x 2' **$75.00**
No. 669ST363 36" x 30" **$106.35**
No. 669ST365 36" x 5' **$215.00**

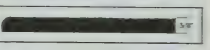
WEARWELL®

791 Static Dissipative Vinyl Anti-Fatigue Mat

A metal scrim is embedded in the vinyl surface to ensure speedy and effective dissipation of static electricity. Drains static electricity from you before it disrupts sensitive equipment, plus it helps relieve fatigue. The durable vinyl surface is bonded to resilient Nitricell® sponge to relieve fatigue. Beveled safety edges. Must be grounded. **Specs:** RTT: 5 x 10^7 to 8 x 10^9- /sq.; RTG: 5 x 10^7 to 8 x 10^9- /sq.; Thickness: 1/2"; Gray. **Includes:** 3/8" (10mm) snap (Installed). ***Three-Year Warranty.*** **(USA)**

No. 770ST713 2' x 3' **$87.60**
No. 770ST377 3' x 5' **$310.20**
No. 770ST0359 3' x 75' **$3,276.00**

WEARWELL®



796 Electro-Soft Dissipative Vinyl Anti-Fatigue Floor Mat

This anti-fatigue mat is three times more resilient than ordinary vinyl sponge. Use in dry areas at risk from static electricity. Beveled safety edges. **Specs:** RTT: 1 x 10^6 to 9 x 10^9- /sq.; RTG: 1 x 10^6 to 9 x 10^9- /sq.; Thickness: 3/8"; Gray. **Includes:** 3/8" (10mm) (Installed). ***One-Year Warranty.*** **(USA)**

No. 770ST947 2' x 3' **$51.60**
No. 770ST635 3' x 5' **$123.60**
No. 770ST636 3' x 60' **$1,256.00**

Contamination Control Mats

Adhesive-coated disposable mats reduce dirt and contaminants being tracked into your cleanroom environment. Tacky adhesive captures foreign particles without coating your shoes. Each mat can last weeks depending on traffic, and layers are numbered to alert you when you need a new one.

TECHNI-STAT

Contamination Control Mats

- 30 layers of adhesive coated polyethylene
- Full surface adhesive on bottom pad prevents pad from moving ■ Easy release tabs ■ Blue

No. 758ST6923 24" x 36" .....**$34.63 /Mat**
No. 758ST6945 26" x 45" .....**$41.09 /Mat**

3M

Clean-Walk Mats™

- 30 layers ■ Clear
- High tack level for longer layer life
- Easy release tabs ■ 4 mats per case **(USA)**

No. 105UN801 18" x 46" .....**$245.26 /Case**
No. 105UN802 25" x 45" .....**$312.70 /Case**

Liberty

Tacky Mat®

- 30 layers ■ Blue
- Anti-microbial germicide in each layer
- Easy release tabs ■ 4 mats per case

No. 508ST012 18" x 46" .....**$135.00 /Case**

ITW ALMA

Contamination Control Mats

CleanStep™

Lightweight frame for easy maneuvering. Non-stick bottom secures frame to any floor surface.

60-layer 24" x 30" gray adhesive mat with 26" x 32" black frame
No. 132ST575 .....**$63.21**

24" x 30" gray 60-layer mat refill
No. 132ST577.....**$132.30 /case of 4**

60-layer 24" x 30" white adhesive mat with 26" x 32" white frame
No. 132ST953 .....**$63.21**

60-layer 24" x 30" white adhesive mat refill
No. 132ST957 .....**$132.30 /case of 4**

IdealMat™

The most economical cost per sheet. Anchors directly to the floor.

60-layer 18" x 46" white mat
No. 132ST2321.....**$88.20 /case of 4**

FREE
STATIC CONTROL AND CHEMICAL AUDITS

Call 800-832-4866 today!

Field Service Kits

TECHNI-STAT

Field Service Kit

For removing static charges at work as well as the field. Special tri-layer vinyl laminate delivers 10^6 to $10^8\Omega$/sq. resistivity. 24"L x 24"W mat features two 12" x 8" pockets, 8' and 10' grounding cords and adjustable wrist strap. Folds into compact package that fits right in your tool kit. .01. second static decay. **(USA)**

No. 758ST1724 Red **$47.86**
No. 758ST1725 Blue **$47.86**

TECHNI-STAT

Pocket Field Service Kit

This 15" x 20" field kit is the lightest in the industry. **Specs:** Resistivity: 1 x 10^6 to 1 x $10^8\Omega$/sq.; Static Decay: .01 sec.; Material: Dissipative vinyl; Thickness: .018 MIL. **Includes:** Work surface, 8' lightweight coil cord, 10' ground cord and 1/4" (7mm) Male snap. **(USA)**

No. 758ST017 ..... **$41.46**

3M

Portable Field Service Kit

Provides effective static protection in a compact kit. Two pockets sewn into work surface provide storage for cords. **Specs:** Resistivity: 1 x 10^6 to 1 x $10^8\Omega$/sq.; Dims.: 22" x 24". **Includes:** Work surface, Ground cord assembly, Alligator clip and wrist strap.

No. 780ST8501 ..... **$60.55**

Lead-Free Mats

Best Seller

Green Mat Indicates LEAD-FREE

TECHNI-STAT

2-Layer Lead-Free Dissipative RoHS Compliant Rubber Mat

Highly visible green mats indicate lead-free workstation. Mat won't burn and is chemical resistant. **Specs:** Top-to-top resistance: 2.8 x $10^7\Omega$/sq. to 6 x $10^8\Omega$/sq.; Resistance to ground: 2.2 x $10^7\Omega$/sq. to 5 x $10^8\Omega$/sq.; Charge decay time 5000V to 50V: <0.01 seconds; Thickness: .060". **Includes:** 3/8" snap and 10' ground cord. (Excluding Rolls) ***Meets:*** *EOS/ESD - S4.1 RTG; ANSI EOS/ESD S4.1: Fed Std 101 Method 4046.*

Mats With Ground Cord

No. 758ST6223 2' x 3' **$50.62**
No. 758ST6224 2' x 4' **$67.50**
No. 758ST6225 2' x 5' **$84.15**
No. 758ST6226 2' x 6' **$101.02**
No. 758ST2304 30" x 4' **$84.15**

Rolls

No. 758ST650 2' x 50' **$534.47**
No. 758ST2305 30" x 50' **$668.09**
No. 758ST2350 3' x 50' **$801.71**
No. 758ST6245 4' x 50' **$1,068.94**

3M

Green ESD 8800 Series Mats and Runners for Lead-Free Areas

Dissipative rubber mats and runners feature a top layer of static dissipative rubber laminated to a bottom layer of conductive rubber. Green color means lead-free work area. Combined layers offer excellent resistance to oil, grease, most common solvents, heat and hot solder. **Includes:** two snap fasteners (installed) and one wrist strap grounding system.

Table Mats	W x L		Table Runners	W x L	
No. 105ST8812	2' X 4'	$65.29	No. 105ST8842	2' X 24'	$391.72
No. 105ST8832	3' x 4'	$130.60	No. 105ST8862	3' x 24'	$669.95

Floor Mat	W x L	
No. 105ST8872	4' x 6'	$211.35

ACL Staticide

Other Colors Available!

Dualmat™ Static Dissipative Reversible RoHS Compliant Mat

This two ply ESD mat is a static dissipative industrial grade elastomer designed for use on tables and other grounded work bench surfaces. Unique features allow conformance to the most stringent ESD and lead-free requirements: low out-gassing and VOC, withstands high temperatures, solder, flux and harsh chemicals. .05 second decay time. This chemically cross linked material will not lose electrical properties and has different electrical resistance on both surfaces: $10^6\Omega$/sq. on colored side, $10^8\Omega$/sq. on black side. Durable and rigid laminates are 2mm thick so it will lay flat and won't curl. Available in Royal Blue, Light Blue, Dark Gray and highly visible green which indicates workstation is lead-free. Suitable for use with constant monitor system. *Meets ANSI ESD S20.20.* **Includes:** (2) Snaps. ***Lifetime Warranty on the Electricals.***

Mats

No. 106ST2436 2' x 3' **$50.00**
No. 106ST2448 2' x 4' **$80.00**
No. 106ST2460 2' x 5' **$100.00**
No. 106ST3060 30" x 60" **$125.00**
No. 106ST2472 2' x 6' **$120.00**
No. 106ST3072 30" x 72" **$150.00**

Rolls

No. 106ST2440 2' x 40' **$600.00**
No. 106ST3040 30" x 40' **$750.00**

Fasteners/Adapters and Snaps

TECHNI-STAT

Push and Clinch Snaps - 3/8" (10mm)
Ideal for multi-layer rubber or vinyl mats. The pronged socket makes installing studs quick and easy. **20/Pk.**
A. No. 758ST867 Socket ....**$29.00/Pk.**
B. No. 758ST868 Stud .....**$29.00/Pk.**

TECHNI-STAT

Snaps with Rivets - 3/8" (10mm) Snaps
3/8" (10mm) snaps with rivet for grounding work mats.
Male snaps
C. No. 758ST848 ....**$17.82 100/Pk.**
Female snaps
D. No. 758ST849 ....**$17.82 100/Pk.**

TECHNI-STAT

Universal Snap Kit - 3/8" (10mm)
Fast and easy way to install 3/8" (10mm) snaps on soft workstation materials. Two screws provided for a wide range of thicknesses. Includes 3/8" (10mm) stud and 3/8" (10mm) socket.
No. 758ST986.....**$2.23**

TECHNI-STAT

Heavy Duty Snap Tool - 3/8" (10mm)
For field installation snaps, sockets or studs. 8" long handle makes it easy to use.
No. 758ST205 .....**$36.98**

TECHNI-STAT

Molded Snap Adapter 3/8" Female and 3/8" Male
Connects mat to banana jack. For wrist strap, ground cord, constant monitor, more. Includes one 3/8" male and one 3/8" female snap with banana socket.
No. 758ST9891.....**$7.72**

Cart/Chair Grounder

TECHNI-STAT

Grounding system
Grounding system for wire shelf carts, chairs or equipment. All stainless components. Stainless Steel 1/2" ground ball and hardware. **(USA)**
No. 758ST0120 .....**$27.50**

Grounding Blocks

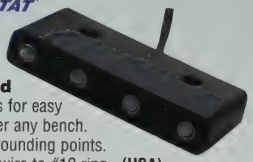
TECHNI-STAT

Low Profile Common Point Ground - 3/8" (10mm) Male Snap
Two workers can use the same ground for wrist straps, snaps on any 3/8" (10mm) female. Grounds mat and worker at the same time. **Specs:** 10mm male snap; 1mΩ resistor; 10' long cord; #10 terminal ring.
No. 758ST0010.....**$12.26**

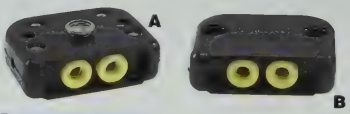
TECHNI-STAT

Common Point Bench Ground
Features dual banana jacks for two wrist straps. Fits standard coil cords. 10' ground to #10 ring terminal. 1/8" (3mm) snaps for parking when not in use. **(USA)**
No. 758ST9743.....**$17.52**

TECHNI-STAT



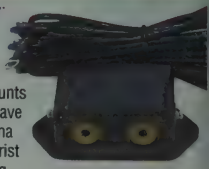
Low Profile Quad Common Point Ground
Two screw holes for easy attachment under any bench. Provides four grounding points. No resistor. 10' wire to #10 ring. **(USA)**
No. 758ST714.....**$12.50**



TECHNI-STAT

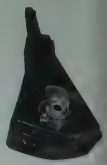
Dual Grounding Block
1MΩ resistance includes 8' ground wire with small terminal on end. Bench mount version includes two screws to attach underbench or top mount.
Top mount 3/8" (10mm) snap
A. No. 758ST0003 .....**$37.90**
Under bench , no snap
B. No. 758ST0004 .....**$28.54**

TECHNI-STAT



Dual Bench Mount Ground
Two workers can use the same ground. Mounts under workbench to save workspace. Two banana jack receptacles for wrist straps and two parking studs for cords when not in use. No resistor. 10' long wire to #10 ring.
No. 758ST007 .....**$16.38**

3M



Wrist Strap/Table Mat Grounding System
Easily snaps onto mats and runners 3/8" (10mm) snap. Grounds two single conductor wrist straps. **Specs:** Resistor: 1 MΩ. **Includes:** Ring connector and 15' ground cord.
No. 780ST3048.....**$17.62**

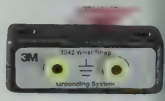
3M

Grounding Kit for Static Protective Hard Laminate
Ground your laminate surface wherever you need.
Specs: Resistor: 1 MΩ. **Includes:** #10 screw, #10 nut, lock washer, lock washer wing nut, self-tapping screw, one 10' grounding cord.
No. 780ST3041.....**$14.03**

3M

Common Point Grounding System
Ground workstation components. Single-row, six-terminal strip, protective cover, three cable clips. Ground cord has a 1 MΩ resistor.
No. 780ST3047 .....**$31.69**

3M



Wrist Strap Grounding System
Grounds two single conductor wrist straps and conveniently mounts beneath the edge of most work benches. **Includes:** 10' grounding cord and mounting hardware.
No. 780ST3042 .....**$21.86**

Table/Floor Mat Grounding Cords

3/8" Snap, Molded Dome Cap
5' Cord, 2 male snap:
A. No. 780ST3043 3M 3043, 1MΩ resistor, black.....**$11.76**
10' Cord, 1 male snap:
No. 758ST150 Techni-Stat, no resistor, black.....**$10.60**
15' Cord, 1 male snap:
B. No. 780ST3040 3M 3040, 1MΩ resistor, black.....**$10.61**

Grounding Cords for 3M 724 Monitor
6' Replacement Cord, One Male Snap
No. 105ST380 3M 2380, no resistor, black **$14.97**
10' Interconnect Cord, Two Male Snaps
C. No. 105ST389 3M 2389, no resistor, black **$13.50**

Anti-Static Mat Cleaners

TECHNI-STAT
Conductive Mat and Table Top Cleaner

Ideal non-abrasive cleaner for almost any surface. Leaves no film, is non-streaking and non-flammable. Effectively removes flux residue, oil, grease, nicotine, dirt and inorganic contaminants without damaging surface. Maintains surface resistivity of anti-static mats and contains no ammonia.

32 oz. bottle with sprayer
No. 758ST6001 .....$7.00

3M 8001 Static Control Surface Mark Remover

Topical antistat maintains a consistent surface resistivity over extended periods. Extra strength removes dirt, grime, and difficult spots and stains. Surface resistivity: 1 x 10^{11} Ω/sq. Odorless.

No. 780ST8001 1 Quart $6.95

TECHSPRAY Zero Charge® Anti-Static Mat & Table Cleaner

Neutral pH, general use cleaner eliminates charge and leaves an anti-static agent that helps prevent static charge build-up. Use on table tops, anti-static mats and work stations. Surface resistivity: <1 x 10^{10}Ω/sq.

No. 754CH733 1 Quart $6.95

ACL Staticide Specialists in Static Control — ESD Mat & Tabletop Cleaner

Non-abrasive, non-streaking and non-flammable. Rejuvenates ESD mats and table tops. Use on table tops, anti-static mats and work stations. Surface resistivity: <1 x $10E^{10}$Ω/sq.

No. 106CH001 1 Quart $7.00
No. 106CH6002 1 Gallon $22.75
No. 106ST020 20 Wipes $10.00

I.C. Work Station & Mat Cleaner

A low ionic, general purpose work station cleaner that removes oil, dirt and grime. Unique formula is mildly cationic to neutralize static charge and is both biodegradable and odorless.

Now in ESD-Safe Bottles!

No. 674ST100 1 Quart $8.10
No. 674CH014 1 Gallon $18.70

Topical Anti-Static Liquids

ACL Staticide Specialists in Static Control

Now in ESD-Safe Bottles!

Staticide Topical Anti-Stat

When properly applied, Staticide complies with or exceeds all electrostatic decay criteria established by NFPA and MIL B-81705.

A. Heavy Duty – For Porous Surfaces
No. 106ST205 .....$17.35

B. General Purpose – For Hard Surfaces
No. 106ST203.....$10.75

C. Hand Ink Remover Wipes
No. 106CH012 .....$7.40

New!

Floor Coatings, Cleaners & Finishes

ACL Staticide Specialists in Static Control

106CH400 106CH101 106CH4600 106ST4705

4000 Static Dissipative Acrylic Floor Finish

Abrasion resistant, controls static generation even at low humidities, resists powdering and discoloration. Electricals will last for 6-12 months with proper maintenance.

No. 106CH400 1 Gallon bottle.....$52.50
No. 106CH005 5 Gallon pail $242.25

4010 Anti-Static Acrylic Floor Stripper

Non-ammoniated, biodegradable stripper removes wax or synthetic finishes quickly with no harsh odors. Will not damage or dull flooring. Non-streaking, low-foaming. (Not Shown)

No. 106CH4010 1 Gallon bottle.....$90.00
No. 106ST401 5 Gallon pail $105.00

4100 Staticide Dissipative Restorer/Cleaner

Economical concentrate cleans and restores gloss and static resistivity of Staticide finishes. Returns floors to proper ESD specifications, extends finish life and removes scuff marks. Cleans 1500 to 2500 sq. ft.

No. 106CH101 1 Gallon bottle $32.50
No. 106CH410 5 Gallon pail $155.00

Longest lasting floor finish on the market!

4600 Staticide Ultra ESD Floor Finish

Economical, dries faster and with higher gloss than other ESD finishes. Superior abrasion performance that lasts up to 24 months without buffing.

No. 106CH4600 1 Gallon bottle.....$65.00
No. 106CH4605 5 Gallon pail $300.00

4800 Staticide Ultra II ESD Dissipative Tile Floor Finish

Specially designed ESD floor finish for ESD tiles and ESD floors. Can last up to 18 months. (Not Shown)

No. 106ST4800 1 Gallon bottle.....$65.60
No. 106ST4801 5 Gallon pail $300.00

4700 Staticide Diamond Polyurethane Static Dissipative Floor Coating

High-performance water-based paint formula dissipates static discharge on concrete and unfinished floor surfaces. Resists yellowing, won't fade colors. Biodegradable.

No 106CH4700 1 Gallon bottle.....$115.00
No 106CH4705 5 Gallon pail $560.00

TECHSPRAY Licron Crystal Static Dissipative Coating

New!

Convert standard work stations, bins, tools and more into ESD-safe equipment. Ideal for areas where components can be damaged by static shock. Crystal clear, will not chip, operates from 0-100% humidity, maintains 10^7-10^9 ohms resistivity.

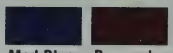
8 oz aerosol
No. 754CH568 .....$30.38

1 gallon liquid
No. 754CH567 .....$244.08

Comfort-Fit Elastic Wrist Straps

Adjustable for all wrist sizes providing continuous skin contact for ESD protection. Includes alligator clip.

Lt Blue



Med Blue Burgundy

Wrist Straps – No Cords

4mm Snap, 1MΩ resistor:
No. 758ST9500 Techni-Stat, light blue $5.00
No. 105ST271 3M 2271, fabric, medium blue $4.43
No. 780ST2204 3M 2204, fabric & nylon, burgundy $9.77

7mm Snap, 1MΩ resistor:
No. 758ST9550 Techni-Stat, light blue $5.00

10mm Snap, 1MΩ resistor:
No. 758ST9555 Techni-Stat, light blue $5.00

Wrist Straps with Cords

4mm Snap, 1MΩ resistor:
No. 758ST9406 Techni-Stat, elastic polyester, 6' coiled cord, light blue $6.50
No. 780ST272 3M 2272, fabric, 5' coiled cord, medium blue $8.25
No. 780ST2214 3M 2214, fabric & nylon, 5' coiled cord, burgundy $14.55
No. 758ST9412 Techni-Stat, elastic polyester, 12' coiled cord, light blue $8.50
No. 780ST2224 3M 2224, fabric & nylon, 10' coiled cord, burgundy $24.60

7mm Snap, 1MΩ resistor:
No. 758ST9706 Techni-Stat, elastic polyester, 6' coiled cord, light blue $6.50
No. 758ST9712 Techni-Stat, elastic polyester, 12' coiled cord, light blue $8.50

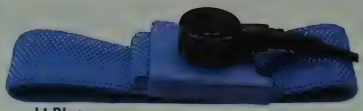
10mm Snap, 1MΩ resistor:
No. 758ST9106 Techni-Stat, elastic polyester, 6' coiled cord, light blue $6.50
No. 758ST9112 Techni-Stat, elastic polyester, 12' coiled cord, light blue $8.50

Lt Blue Med Blue

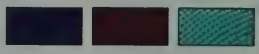
Techni-Stat Ultra Comfort Soft Adjustable Wrist Strap

Extra comfortable soft fabric material stretches when you move.

4mm Snap, 1MΩ resistor:
No. 758ST9144 Strap only $7.89
No. 758ST190 6' coiled cord.....$11.38
No. 758ST193 12' coiled cord.....$11.38



Lt Blue



Med Blue Burgundy Green

Techni-Stat Constant Contact Hinged Wrist Straps

Unique constant contact hinge keeps continuity between snap and buckle when buckle is opened. Emerald green and ruby red straps feature translucent buckle. Material: fabric.

4mm Snap, 1MΩ resistor:
No. 758ST9638 Strap only, medium blue $7.78
No. 758ST9938 Strap only, burgundy $9.00
No. 758ST9968 Strap only, green $9.00
No. 758ST9608 6' coiled cord, medium blue $7.78
No. 758ST9908 6' coiled cord, burgundy ..$16.40
No. 758ST9948 6' coiled cord, green.....$16.40
No. 758ST9628 12' coiled cord, medium blue $17.75
No. 758ST9928 12' coiled cord, burgundy....$18.40
No. 758ST9959 12' coiled cord, green.....$18.40

Techni-Stat Green Lead-Free Wrist Strap

Green clearly indicates lead-free work area. Material: fabric.

4mm Snap, 1MΩ resistor:
No. 758ST9009 6' coiled cord, ...$8.20
No. 758ST9028 12' coiled cord.....$10.26

Quick Zip Wrist Straps

Strap with zipper-style latching mechanism for fast on-off. Exclusive "comfort bumps" design on the conductive interior lets air flow between the band and skin for more comfort. Thermoplastic, medium blue.

4mm Snap, 1MΩ resistor:
No. 105ST620 3M 4620, strap only, blue ..$2.82
No. 105ST4650 3M 4650, 5' coiled cord, alligator clip, blue $11.22

FREE ESD and chemical audits – just call 800-832-4866!

Metal Wrist Straps

4mm Snap: Techni-Stat Ergoband™ Adjustable Metal Wrist Bands

Patented linking system lets you adjust 5" band to fit any wrist size by adding up to 5 extra links (included). Quality stainless steel coated with oven-baked epoxy for durability. 1MΩ resistor.

No. 758ST7346 6' cord, blue.....$17.60
No. 758ST6795 12' cord, blue $19.80

4mm Snap: 3M 2200 Spiedel® Metal Wrist Straps

Features a very comfortable, durable Spiedel expansion strap. For use with 3M 2210, 2220, 4610, 4611 ground cords (not included). Includes alligator clip. Black. No resistor.

No. 105ST2205 Small $19.00
No. 105ST206 Medium $23.08
No. 105ST2207 Large $20.45

4mm Snap, 1MΩ Resistor: Techni-Stat Cleanroom Adjustable Metal Wrist Strap

Cleanroom-safe, expandable stainless steel band adjusts for comfort. Black

No. 758ST9477 Strap only.....$13.55
No. 758ST9478 6' coiled cord $21.66
No. 758ST9479 12' coiled cord $24.55

7mm Snap, 1MΩ Resistor: Techni-Stat Adjustable Metal Wrist Straps

For cleanrooms and laminar flow areas. Flexible stainless steel band adjusts to any size. Includes alligator clip. Black.

No. 758ST1064 6' cord $16.25
No. 758ST1066 12' cord.....$17.75

Dual Conductor Wrist Straps for 3M 724/725 Monitors
For 3M 724 workstation monitor or 3M 725 wrist strap monitor only. 2MΩ resistor. Black.
No. 105ST381 Small, 5' cord, 3M 2381 .....**$42.95**
No. 105ST384 Small, no cord, 3M 2384.....**$30.15**
No. 105ST2382 Medium, 5' cord, 3M 2382....**$42.95**
No. 105ST238 Medium, no cord, 3M 2385 ..**$21.93**
No. 780ST2383 Large, 5' cord, 3M 2383 ....**$48.01**
No. 105ST386 Large, no cord, 3M 2386.....**$21.93**

Lightweight Blue Thermoplastic Wrist Strap
3M's exclusive "comfort bumps" design on the conductive interior lets air flow between the band and skin for more comfort. Cord not included. No resistor.
No. 105ST4720 3M 4720.....**$6.60**

Dual Conductor Wrist Straps
For the 3M 790 continuous workstation monitor only. 2MΩ resistor. Black.
Metal Wrist Strap
No. 105ST2381 Small, 5' cord, 3M 2381VM **$38.30**
No. 105ST2384 Small, no cord, 3M 2384VM **$26.15**
No. 105ST382 Medium, 5' cord, 3M 2382VM **$42.90**
No. 105ST2385 Medium, no cord, 3M 2385VM **$26.15**
No. 105ST383 Large, 5' cord 3M 2383VM **$49.53**
No. 105ST2386 Large, no cord, 3M 2386VM **$26.98**
Dual Conductor Blue Fabric Adjustable Wrist Strap, no cord, Elastic nylon
No. 780ST2368 (2368VM) **$8.79**

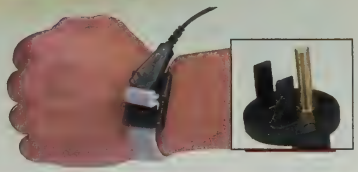
Disposable Wrist Straps

3M Disposable Wrist Strap
Self-sticking copper end attaches to any convenient electrical ground. Non-woven conductive film strap attaches to wrist with hypo-allergenic adhesive. 4' length. 1-5 MΩ resistor.
No. 780ST2209 .....**$18.50 10 pack**

Wrist Straps with Grounding Systems

TECHNI-STAT

ESD Grounding System
Ideal Stat-Gard™ plug checks ground circuit first for common ground faults before using it to drain static charges. Fabric strap, 4mm snap, 1MΩ resistor.
Adjustable wrist strap, 12' coiled cord, Ideal Stat-Gard ground plug
No. 758ST4620.....**$44.65**
Ideal Stat-Gard ground plug only
No. 462TE038.....**$37.66**



No Doubt Wrist Strap Set
Plugs directly into wall outlet. Two insulative AC pins and round grounding pin complete ground path. Fabric strap, 4mm snap, 1MΩ resistor, 6' coiled cord, wall plug, gray.
No. 758ST095 .....**$22.75**

Wrist Strap Grounding Cords

Single Conductor, 4mm Snaps, 1MΩ Resistor, Alligator clip
5' & 6' Coiled Cords:
No. 758ST004 Techni-Stat, 6', black **$7.72**
No. 105ST4610 3M 4610, 5', black **$8.39**
No. 758ST2308 Techni-Stat, 6', ruby.....**$11.90**
No. 758ST2408 Techni-Stat, 6', emerald **$11.90**
No. 780ST2210 3M 2210, 5', black **$17.65**
10' & 12' Coiled Cords:
No. 758ST006 Techni-Stat, 12', black **$8.14**
No. 105ST611 3M 4611, 10', black, ...**$8.58**
No. 758ST2328 Techni-Stat, 12', ruby.....**$13.22**
No. 758ST2429 Techni-Stat, 12', emerald....**$13.22**
No. 780ST2220 3M 2220, 10', black **$18.41**

Single Conductor, 7mm Snap, 1MΩ Resistor, Alligator clip
6' Coiled Cord:
No. 758ST1001 Techni-Stat, black **$7.72**
12' Coiled Cord:
No. 758ST0002 Techni-Stat, black **$8.14**

Techni-Stat Portable Service Kit Grounding Cord
8' banana clip attaches to ground, dual 10' cords with 4mm snaps attach to wrist strap and mat. 1MΩ resistor, black.
No. 758ST2185 .....**$17.62**

Dual Conductor Cords w/Right Angle Connection
For use with non-3M monitors only. 3.4mm plug tip.
5' Coiled Cord, 1MΩ resistor:
No. 105ST2391 3M 2391, gray w/blue plugs **$21.65**
10' Coiled Cord, 1MΩ resistor:
No. 105ST2392 3M 2392, gray w/blue plugs **$25.75**
20' Coiled Cord, 1MΩ resistor:
No. 105ST2393 3M 2393, gray w/blue plugs **$31.93**

Dual Conductor Cords for 3M 724,725, 790 Monitors
New double insulated jackets improve durability and reduce cord weight. Only for 3M 2380 and 4720 series wrist straps attaching to 3M 724, 725 or 790 monitors.
5' Coiled Cords, 1MΩ resistor:
No. 780ST2360 3M 2360, gray **$21.85**
No. 105ST236 3M 2360R w/ right angle, gray **$24.39**
10' Coiled Cords, 1MΩ resistor:
No. 780ST2370 3M 2370, gray **$20.54**
No. 105ST2370 3M 2370R w/ right angle, gray **$25.96**
20' Coiled Cords, 1MΩ resistor:
No. 105ST2371 3M 2371, gray **$30.85**
No. 105ST239 3M 2371R w/ right angle, gray **$31.95**

Heel and Toe Grounders

Heel and Toe Grounders – Provide a reliable path for static charge to drain to ground. All feature non-slip, non-marking heel cups and 1MΩ resistors (unless marked). Color straps on grounders let you see if everyone is in compliance at a glance. Grounders must be worn on both feet.

Comfort Heel Grounders

Techni-Stat DayGlow Heel Grounder. 12' stretch velcro strap over top of shoe for maximum comfort. Bright green makes checking users for compliance easy.
No. 758ST7530 1MΩ resistor **$7.08**

Techni-Stat Elastic Strap Low Cost Heel Grounder. 9" stretch velcro strap over top of shoe for maximum comfort.
No. 758ST7201 1MΩ resistor **$6.50**

Techni-Stat Ergo One Heel Grounder. 12' stretch velcro strap over top of show for maximum comfort.
No. 758ST500 1MΩ resistor, blue.....**$7.20**
No. 758ST202 1MΩ resistor, black.....**$7.20**
No. 758ST0402 2MΩ resistor, blue.....**$8.20**
No. 758ST0302 2MΩ resistor, black.....**$8.20**

Techni-Stat Red Hi-Visibility Stretch Heel Grounder. Elastic heel strap lets grounder fit all types and sizes of shoes comfortably.
No. 758ST086 1MΩ resistor.....**$7.67**

Techni-Stat Elastic D-Ring Heel Grounder. Strap over top of shoe fits through D-ring attached to elastic so grounder stays comfortable all day long.
No. 758ST558 1MΩ resistor, blue **$9.73**
No. 758ST559 1MΩ resistor, red.....**$9.73**

3M 2051 Elastic Shoe Grounder. 9-3/4" stretch velcro strap over top of shoe maximum comfort.
No. 780ST051 1MΩ resistor, red.....**$11.17**

Standard Heel Grounders

Techni-Stat, black, 1MΩ resistor
No. 758ST225.....**$5.00**

3M 2044 economy grounder, black w/ yellow strap, 1MΩ
No. 105ST2044.....**$4.45**

Non-Marking
Techni-Stat, non-marking heel, no resistor, gray
No. 758ST757.....**$10.18**

Techni-Stat, non-marking heel, 1MΩ resistor, gray
No. 758ST7573.....**$10.18**

Techni-Stat, non-marking heel, 2MΩ resistor, gray
No. 758ST7571.....**$10.18**

3M 2056, non-marking heel, red, 1MΩ resistor
No. 105ST056.....**$13.51**

Disposable Heel Grounders

Techni-Stat Conductive Shoe Covers. Inexpensive alternative to heel grounds – less than 60¢ a pair! Non-skid polypropylene bootie maintains grounding with full mobility. **300/box.**
No. 758AP2002 blue.....**$88.49**

Techni-Stat Hi-Visibility Heel Grounders. Pressure-sensitive static dissipative straps simply stick on heel. Bright yellow color can be easily seen at a distance to insure compliance. **100/pk.**
No. 758ST0368 .....**$43.56**

3M 2045 Grounding Strap. Strap clips to upper part of shoe and sticks to bottom of heel. Fits all low cut shoes. **100/box.**
No. 780ST2045 .....**$46.78**

TECHNI-STAT

Full Coverage Sole Grounder

Combines a heel and toe grounder into one for guaranteed coverage. Stretch velcro strap over top of shoe.

No. 758ST505 1MΩ Small, black.....**$17.40**
No. 758ST506 1MΩ Medium, black.....**$17.51**
No. 758ST507 1MΩ Large, black.....**$18.09**

Toe Grounders

For use with high heeled shoes. Elastic stretch ankle strap for comfort.

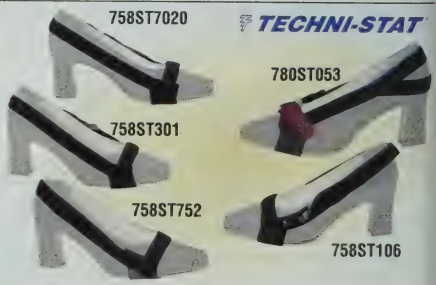
Techni-Stat, no resistor, black
No. 758ST7020 .....**$9.73**

Techni-Stat, 1MΩ resistor, black
No. 758ST301 .....**$9.73**

3M, 1MΩ resistor, burgundy
No. 780ST053 .....**$10.16**

Techni-Stat, 2MΩ resistor, black
No. 758ST106 .....**$9.73**

Techni-Stat, non-marking, black
No. 758ST752 .....**$12.02**

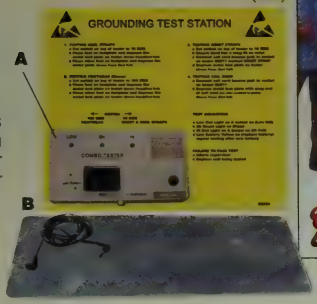


TECHNI-STAT

Tests wrist strap, coil cords and footwear!

Combo Tester & Wall Mounted Test Station

Combo units test wrist straps, coil cords and footwear. Tests both US and European standards. A slide switch on top of the tester selects either 10MΩ for wrist straps or 100MΩ for footwear. Features a large touch plate, audible and visual alerts and low battery indicator. Test ground cords with front mounted banana jack. Has a test range of 750k to 100MΩ. **Includes:** 9V battery. **(USA)**



Combo Tester (only)
A. No. 758ST8211 .....**$204.60**

Combo Tester Wall Mounted Test Station
Includes: Combo tester, bright yellow back plate with operating instructions, 7-1/2" x 14" aluminum footplate with ground cord.
B. No. 758ST8506 .....**$320.15**

Combo Tester with 36" Stand and 15" x 18" Solid Footplate (no yellow back plate)
C. No. 758ST2450 .....**$447.59**

Combo Tester with 7" x 18" Aluminum Footplate (Not Shown)
No. 758ST451 .....**$290.28**

Dual Footwear & Wrist Strap Tester

Constructed to take the rigors of a factory environment, and configured to meet your individual space and application requirements. Tests both feet and wrist strap simultaneously. 36" high stand is constructed of steel with welded joints for strength, and is 100% powder-coated for long-lasting durability. Dual systems feature two separate left and right aluminum footplates (7-1/2" x 18") attached to stand. Wrist straps and cords are tested on all models via a banana jack connection. Tester mounts on stand with 4 snaps (no wires needed). Tests wrist straps and cords at 10MΩ and 100MΩ for footwear. Has a test range from 750k to 100MΩ. **Features:** audible and visual alerts and a low battery indicator. **Includes:** 9V battery. **(USA)**

Dual Footwear and Wrist Strap Tester w/Stand and 2 Footplates (15" x 18" footplate cut in half)
No. 758ST250.....**$558.08**

Dual Footwear and Wrist Strap Tester Only
No. 758ST251.....**$282.69**

Wrist Strap Tester

Tests wrist straps and coil cords from 750k to 10MΩ with just a touch of the plate. Test coil cords with front mounted banana jack. **Features:** Visual and audible alerts and a low battery indicator. **Includes:** 9V battery. **(USA)**
No. 758ST820 .....**$171.37**

Wrist Strap Tester

Simply connect the grounding wire and press the pad. The green "GOOD" lamp will light up and an audible signal will sound if grounding system is safe. **Specs:** Resistance: low, <500KΩ; good, 500KΩ-10MΩ; high, 10MW. Measures: 3-1/5" x 4-1/2" x 1-1/2". **Includes:** 9V battery. **(USA)**
No. 758ST8507 .....**$114.24**

Portable Wrist Strap Tester

High quality, lightweight tester with large 3/4" touch button for easy wrist strap testing. Checks all standard wrist straps and coil cords. Audible signal will sound when good. Test range from 800k-10mΩ. **Includes:** 9V battery and case.
No. 758ST8203 .....**$92.71**

3M 740 Wrist Strap & Foot Wear Tester

Designed for wall mounting in your facility. Can be connected to such external devices as computers, electrical door opening systems, etc. Switches off after 30 minutes of non-use. **Specs:** Test voltage: 20V; Resistance ranges: 750kΩ (lower limit); Wrist strap upper limit: 2, 5, 10 and 35MΩ; Foot wear upper limit: 10, 35, 50 and 100MΩ. *Footplate sold separately.*

Wrist and foot strap system (Non-certified)
No. 780ST0740 .....**$446.15**

Wrist and foot strap system (Certified)
No. 780ST740 Shown.....**$530.61**

Stainless Steel footplate
No. 780ST741....**$131.13**

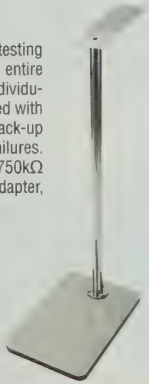
3M 746 Wrist Strap Tester

For daily testing in production facility or periodic testing at remote sites or field service locations. Tests entire wrist strap system while worn or components individually to isolate an identified fault condition. Supplied with an AC adapter and long-life lithium battery as back-up power for portable applications or power failures. **Specs:** Resistance ranges: 10MΩ (Upper), 750kΩ (Lower); Test voltage: 19V. **Includes:** tester, AC adapter, lithium battery and wall mounting kit. (Germany)
No. 105ST746.....**$240.30**

3M Portable Pedestal Stand For Testers

New!

Provides support for 3M 740 & 746 testers. Durable stainless steel with 45° plate for best viewing angle. Assembled height: 45-1/2"; Weight 9 lbs.
No. 105ST749.....**$168.00**



ACL Staticide
Specialists in Static Control

ACL 750 Wrist Strap and Heel Grounder Combo

Test wrist straps and heel grounders simultaneously. Included software compiles results of up to 30,000 employees and lets you generate reports in Excel, Access and Oracle. Compatible with most card systems, can also be connected to a PC. **Includes:** Test meter, software, dual path footplate, stand, RS-232 cable. **Specs:** Adjustable resistance range from 500k – 100M. **(USA)**

ACL 750 Combo Tester with Footplate, Software, Stand
No. 106TE008 .....**$1,875.00**

ACL 750WS Combo Tester with Footplate and Software (stand not included)
No. 106ST751 .....**$1,730.00**

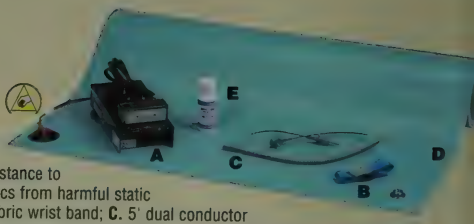
Optional Barcode Scanner
No. 106TE755.....**$455.00**

Optional Proximity Reader
No. 106ST741.....**$785.00**

TECHNI-STAT
Continuous Monitoring Kit

Best Seller

- Eliminate checking mat ground connections
- Eliminate wrist strap testing
- Eliminate the need to log results
- Check wrist strap grounds, mat grounds and monitor ground continuously



Continuously verify the resistance of the operator and workstation ground connections. The monitor uses a reliable resistance method that actually includes the operators skin resistance to determine if the system is operating properly. This is the ideal way to protect your electronics from harmful static charges. 10mm snap. **Kit Includes: A.** Dual constant monitor system; **B.** dual conductor fabric wrist band; **C.** 5' dual conductor coil grounding cord; **D.** 2' x 4' blue triple layer table mat with snap fasteners and wrist strap grounding system; **E.** 1 oz. Techni-Stat ESD hand lotion.

Continuous Monitoring kit with Static Mat
No. 758TT980 .....**$351.75**

Continuous Monitoring kit without Static Mat
No. 758TT360 .....**$253.05**

TECHNI-STAT
Continuous Monitors

Monitors wrist strap and work surface for one or more operators. Uses a DC current source to continuously measure loop resistance. Includes power supply.

Operator Systems
One-Operator Monitor
No. 758ST9201 .....**$48.69**
One-Operator Monitor and Work Surface
A. No. 758ST9202 .....**$106.27**
Two-Operator Monitor and Work Surface
B. No. 758ST9203 .....**$161.53**

Workstation Brackets
No. 758ST9212 One-Operator ..**$3.27**
No. 758ST9231 Two-Operator ..**$3.27**

TECHNI-STAT
Ground Monitor

Continuously monitors operator and work surface. Eliminates need for daily wrist strap testing.

Features:

- Use with any brand single-wire wrist strap and cord components
- Grounds and verifies resistance of mat to ground
- Dual status LEDs for operator monitoring
- Audible and visual failure alarms
- Disconnect snap without activating alarms
- Wave distortion technology

No. 758ST0873 .....**$116.10**

3M
Ground Man™ Ground Monitors for Tools and Iron Man™ Workstation Monitors

New!

Monitors AC and DC overvoltage from soldering/desoldering equipment and electrical discharge from tools and non-grounded operator during production. Audio and visual alarms alert operators to overvoltage exposure.

Iron Man™ Workstation monitor
No. 105ST330.....**$112.95**

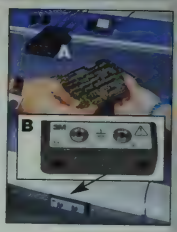
Iron Man™ Plus Workstation, wrist strap and mat monitor
No. 105ST331.....**$172.95**

Ground Man™ 3-Point tool monitor
No. 105ST333.....**$201.15**

Ground Man™ Plus 3-Point tool and wrist strap monitor
No. 105ST334.....**$258.75**

3M
724 Wrist Strap Workstation Monitor

Continuously verifies the resistance of the operator and workstation ground connections. If operator's resistance exceeds 10MΩ or 35M audible and visual alarms are triggered. Monitors a visitor or second operator at workstation and, if one conductor fails, the other will still function to prevent sensitive components for being exposed to static. **Includes:** Monitor, 732 Dual remote and mounting hardware. **(USA)** ***(Works with 3M dual wire wrist straps only)***
A. No. 105ST427 .....**$158.85**



Power Supply for Work Station Monitor
No. 105ST7247.....**$7.84**

Monitor Stand-By Jack – Disconnect ground cord from your wrist band and leave the workstation without deactivating the static monitor.
No. 780ST3057.....**$12.15**

Best Seller

3M 732/733 Dual Conductor Remote Input Jacks

Use with 724 wrist strap workstation monitor. Grounds and monitors two operators at separate workstations. Includes 6' cord. **(USA)**

Replacement Remote Dual Input Jack
B. No. 105ST732 .....**$36.60**

Remote Splitter Kit
No. 105ST733 .....**$21.10**

3M
725 Dual Conductor Portable Continuous Wrist Strap Monitor

Compact, portable unit continuously monitors both you and your wrist strap. Visual and audible alarm for faulty ground connection or low battery level. Parking plate lets you disconnect ground cord and move to another work area without setting off alarm. **Specs:** Test voltage: 9V; Test current: <1mA; Upper resistance limits: Wrist strap: 35MΩ; Ground clip: 10MΩ. Requires 9V alkaline battery (not included). ***(Works with 3M dual wire wrist straps only)***
No. 105ST725.....**$89.90**

3M
790 Continuous Static Workstation Monitor

Best Seller

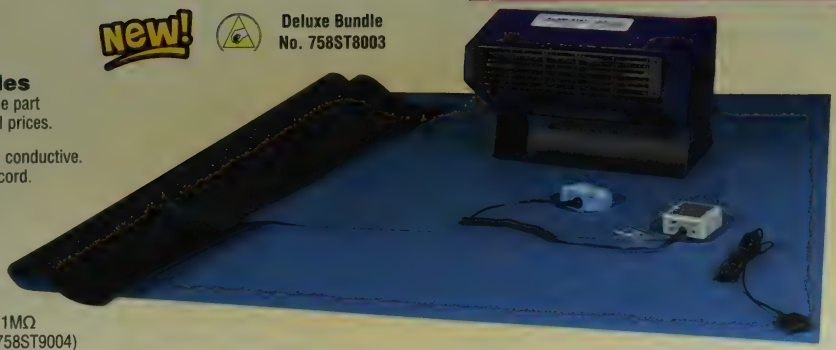
Mount this small, cost-effective unit anywhere to monitor static electrical buildup. Two wrist strap input jacks let two people use a workstation simultaneously. **Features:** Audio and visual alarms; Pre-select voltages: 1V, 3V, 6V, 9V; Static dissipative plastic housing. **Specs:** Input: 120VAC ±10%; Output; 25VDC @50mA rated load; Ground disconnect: 10Ω ±20%. **Includes:** 790 Static monitor, 790 AC adapter, Dual Lock™ mounting fasteners and one tow-wire connector. ***One-Year Warranty.*** **(USA)** ***(Works with 3M dual wire wrist straps only)***
A. No. 105ST790 (790) **$92.65**

Monitor Stand-By Jack - disconnect ground cord from your wrist band and leave workstation without deactivating the static monitor.
No. 780ST3057 (3057) **$12.15**

TECHNI-STAT

New!

Deluxe Bundle
No. 758ST8003



ESD Workstation Bundles

Outfit an entire workstation with just one part number and save 10% off the individual prices.

Floor Mat - 3' x 4' blue, dissipative and conductive. **Includes:** 3/8 female snap, 10' ground cord. (758ST6134)

Table Mat - 2' x 3' blue, dissipative and conductive. **Includes:** 3/8 female snap, 10' ground cord. (758ST6123)

Wrist Strap & Cord: Blue adjustable with 5/8" conductive fiber inner-surface. 1MΩ resistor, 1/4" (7mm) snap; 6' coil cord (758ST9004)

Continuous Monitor: Monitors wrist strap and work surface for one operator. Uses a DC current source to measure loop resistance. **Includes:** power supply. (758ST9201)

Table Top Ionizer: Efficient workstation ionizer effectively eliminates electrostatic charges quickly and reliably. Covers a 2' x 5' area. Self-balancing for 0 ±5V balance. Emitter points never need replacement. (758ST3300)

Includes	Standard Bundle	Premium Bundle	Deluxe Bundle
Floor Mat	X	X	X
Table Mat	X	X	X
Wrist Strap and Cord	X	X	X
Continuous Monitor		X	X
Table Top Ionizer			X
TT No.	**758ST8001**	**758ST8002**	**758ST8003**
If purchased separately	**$165.09**	**$213.78**	**$728.78**
Bundle PRICE	**$148.59**	**$192.40**	**$655.90**

3M

New!

EM Aware® ESD Monitor Kits

Everything you need for comprehensive electrostatic discharge events, EMI, electrostatic field, and ionization monitoring. Quickly connect several EM Aware monitors to a computer and immediately start collecting ESD/EMI data. Each kit contains a number of selected EM Aware monitors, remote antenna, a USB data acquisition system, Windows®-based software, worldwide power adapter and all necessary cables and interconnects.

105ST260

CTK2A6-C - Offers EM Aware's event monitoring and static voltage monitoring and ionization balance. Recommended for tool and workstation monitoring in and out of cleanrooms where monitoring of ESD events and static-field voltage are key.
No. 105ST260 .....**$11,895.00**

CTK3A5-C - Full featured kit provides the broadest range of monitoring capabilities including ESD events, static voltage, ionization balance and ionization decay. Recommended for inside or outside the cleanroom where ionization, balance and decay are critical parameters.
No. 105ST350 .....**$10,895.00**

CTK1A4-C - Identify, measure and manage the most critical parameters that typically signify harmful ESD events in manufacturing environments, inside and outside the cleanroom. Recommended for tool and workstation monitoring where ESD events are a major concern.
No. 105ST140 .....**$6,895.00**

105ST350

105ST140

3M *Easily locate and identify ESD events!*

New!

ESD Pro Event Detector

Handheld indicator detects and counts discharges and strength of each ESD event when preset level is exceeded. Provides audio alarm and indicates strength on LED bargraph. **Specs:** Sensitivity: 1.1000V; Threshold: Adjustable; Discharge polarity: both; Event count: 4-digit counter; EMI event rejection: CDM mode select; all events select; Power: 9-volt alkaline battery. ***One-Year Warranty.***
No. 105ST082 .....**$1,146.24**

3M

Ground Pro™ Handheld Ground Integrity Meter

Verify grounding parameters with accurate measurement of ground impedance in a ground noise environment. Measures impedance down to milliohms and automatically cancels impedance of test leads so that milliohm values can be read accurately. Also measures AC and DC voltages on the ground while separately measuring high frequency voltage (EMI). An alarm alerts personnel when limits are exceeded. **Includes:** Test leads; Storage case, 9V battery, Users guide.
No. 105ST051 .....**$1,321.50**

TECHNI-STAT

Digital/Analog Surface Test Kit

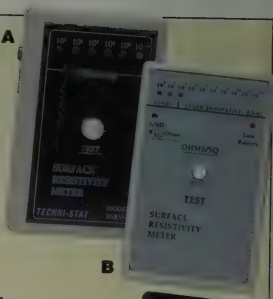
Tests voltage and continuity in one unit. Easy-to-read large digital and analog megohm microprocessor-controlled tester. Includes scale on faceplate from <10^4 to <10^{11} range. Select desired test range and press test button for reading. Backlite display available for low light conditions. Results may be locked in for later recall. Automatic shut off conserves battery. Includes foam-fill case. ***Three-Year Warranty.***

No. 758ST8573.....**$1,592.74**

Specifications:

Test range:
Analog: 100G/100v 100G/500v
Digital: 20G/100v
Electrodes: Two 5 lbs weights
Readout: Digital and analog (instantly)
Test voltage: 10, 100, 500 volts
Low battery indicator: Yes
Millivolt test: ±1m-1999mV
Voltage test: 500 volts
Water Resistant and Dustproof: IP54

Surface Resistivity Meters



Conveniently check performance of anti-static bags, static dissipative mats, conductive work surfaces and other anti-static products. Classified per ESD guidelines. Both measure surface resistivity and RTG. **(USA)**

6 Lights; RTT: 10^5-$10^9\Omega$/sq.
A. No. 758ST600 .....**$280.91**

10 Lights; RTT: 10^3-$10^{12}\Omega$/sq.
B. No. 758ST1000 .....**$365.19**

Surface Resistivity Meter

The indicator uses 10 colored LED's for wide range surface resistance measurement applications in accordance with ASTM D-257. Provides both RTT and RTG measurements. Lay meter on surface, press the green button, and a test voltage of 9V is sent between two points. The LED light displays resistance. **Specs:** Resistivity: 7 x 10^3 to 9 x $10^{11}\Omega$/sq.; 10 LEDS; Battery: 9V. **(USA)**

No. 758ST8560 .....**$370.80**

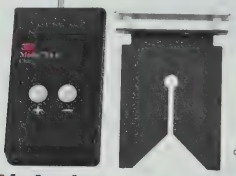
NEW LOWER PRICE!

3M

718 Static Sensor

Measures static voltages on objects and surfaces caused by electrostatic charge buildups. Helps identify ESD trouble-spots. Three membrane which control functions. The RANGE/ZERO button switches between the two measurement ranges of 0-2,000V and 0 - 20,000V, and, if held for longer than 3 seconds, it resets the voltage display to 0V. Ranging system assists you to make quick and easy measurements accurate to ±5%. **Specs:** Ranges: 0-2kV (10W), 0-20kV (high); Distance indicator: LED targets. **Includes:** Static sensor, including meter, Certificate of performance and manual. ***One-Year Warranty.***

No. 105ST0718 (Certified) **$697.33**



3M

718A Air Ionizer Test Kit

Combined with the 718 static sensor, this air ionizer test kit provides periodic verification of air ionizer performance. Consists of a charge plate and a charger allowing measurement of the ionizer's offset balance. The charger can be used to deposit an electrostatic charge on the plate. **Specs:** Charger output: 1100V min. for positive or negative voltage; Battery: 9V. **Includes:** Charge plate, Charger, Certificate of performance. ***One-Year Warranty.*** **(USA)**

No. 105ST719 .....**$269.31**

ACL Staticide
Specialists in Static Control

ACL 390 Surface Resistivity Meter

Durable, lightweight handheld meter measures both surface resistivity (Rtt) and resistance to ground (Rtg) from 10^3 to $10^{12}\Omega$. Automatically generates a 10V or 100V test voltage from a 9-volt battery (included) and shows results on a multi-colored LED display. Used with internal parallel stainless steel electrodes or with optional external electrodes through built-in peripheral jacks. Meter includes ground cord, case and calibration certificate. *Complies with ANSI-ESD S 7.1 and ESDAA S20.20.*

No. 106ST390.....**$545.10**

5 lb. Weight Kit
Includes: (2) 5 lb. Probes, (2) Cords and Case.
No. 106ST391.....**$218.00**

ACL Staticide
Specialists in Static Control

ACL 300B Electrostatic Locator

This pocket-size monitor measures static charges from zero to 30,000 volts. Designed to do close-in repetitive reading. **Specs:** Measures charge to 30,000V; QuickZero® function instantly rezeroes the instrument and provides ground compensation for the user. **Includes:** Meter and battery. ***One-Year Warranty.*** **(USA)**

No. 106ME010 .....**$410.00**

No. 106AC013 Carrying case **$37.00**

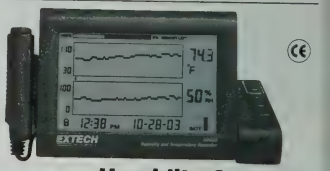
ACL 400 Ionized Environment Electrostatic Locator
Chopper stabilized and provides continuous readings from 0 to 30,000 Volts.
No. 106ST400.....**$675.00**

simco
Advanced Technology Company

FMX-003™ Electrostatic Fieldmaster

This pocket sized, battery operated electrostatic field meter used for locating and measuring static charges. Designed to make measurements in areas using air ionization. Automatic range switching up to ±20kv (20,000V) at 1". Power On/Off, Zero adjustment, Ion Balance and Hold are all push button operations. Has a conductive case and a ground snap. Uses 9V battery.

No. 709ST003.....**$550.00**



EXTECH INSTRUMENTS
A FLIR COMPANY

Humidity & Temperature Chart Recorder

For monitoring and recording temperature and humidity. Hi/Low setpoints actuate audible and visual alarms. Simultaneous numerical and graphical display of humidity and temperature readings, plus time and date. Measures humidity 10 to 95% RH, temperature from –20°F to 140°F, and calculates dew point. Large dual graphical LCD with adjustable vertical and horizontal TAC resolution. Stores up to 49,000 data points and can be downloaded via the RS-232. Replaceable probe does not require calibration and is detachable for remote measurements up to 1 meter. Output socket used with optional external alarm module; Desk or wall mount. Dimensions: 5" x 7.7" x 0.9" (129 x 195 x 22mm). **Includes:** Built-in stand, Humidity/Temperature sensor, (3) AA batteries, PC Cable, Software and 117 VAC adapter. ***One-Year Warranty.***

No. 355TE5520 (RH520) **$229.99**

TECHNI-STAT

Overhead Ionizing Blower

- AC technology with an inherent balance of ±5V
- 6 foot target distance
- Point cleaning feature for fast, easy maintenance
- Emitter points never need replacing

Best Sellers

758ST1188

758ST1199

Provides the highest airflow and widest coverage area. Ideal where fast discharge time is critical. Available in 3 or 4 fan models. Uses reliable, low maintenance AC corona technology with high flow rate fans to quickly discharge static.

No. 758ST1188 (4 fans).....**$1,040.00**
No. 758ST1199 (3 fans) **$865.00**

SIMCO An Illinois Tool Works Company

Aerostat® Guardian™ – Overhead Ionizing Air Blower

- Inherently balanced to ±5 V
- Built-in emitter point cleaner
- Integrated heater and task lights
- Emitter points never need replacement

The Guardian provides fast static charge decay over an entire work surface area producing an air volume from 150 to 300 CFM. Equipped with task lighting, an ionization indicator light, and an integrated heater, it offers user-friendly operation while effectively protecting even the most sensitive components from ESD damage. Featuring, Inherent balance technology, Built-in emitter point cleaning. The Guardian provides "Maintenance Free" Operation. **Specs:** Discharge time: <6 sec. at 18". Measures 42-3/4"L x 4"H x 6- 3/4"D; Weight: 16 lbs. **(USA)**

No. 709ST0001 120 VAC.....**$915.00**
No. 709ST261 230 VAC.....**$922.00**

Air filter retainer (3 required)
No. 709ST017 .....**$12.15**
Air filter pack - 6 filters
No. 709ST810 .....**$18.21**

3M

Overhead Ionizer

Space-saving overhead ionizer emits steady state DC ions with low airflow. Open-cell foam filters on fan intake protect internal components from environmental contamination. **Features:** Alarm relay closure circuitry; Bi-color LED indicator; 44" with three fans; 114 CFM; High and low speeds; Self-balanced - no calibration needed; Visual performance indicator; Broad static neutralization over the workbench; Reduces manual emitter point cleaning. ***One-Year Warranty.***

No. 105ST991 (991) **$1,060.00**

Replacement Filter
No. 105ST9912 (991-F) **$7.75 3/Pack**

SIMCO An Illinois Tool Works Company

Centurion Cleanroom Overhead Ionizing Blowers

Two or three fan models offer superior balance performance through emitter array design and high-gain dual feedback circuitry. Uses corona DC ion technology to eliminate charges cleanly, quickly and reliably. **Features:** Rapid static charge neutralization; ±3V offset voltage (balance); Class 10 cleanroom ISO-4 compatible; Fan speed control; Fan speed lock; LED alarm indicator; Built-in emitter point cleaner; Patented emitter design. 100-240 VAC, 50/60 Hz.

3 Fan Unit covers 2 ft X 4 ft area; Air volume output: 150-345 CFM
No. 709ST423.....**$1,230.00**
2 Fan Unit covers 2 ft x 3 ft area; Air volume output:100-230 CFM
No. 709ST9430.....**$1,025.00**

SIMCO An Illinois Tool Works Company

Aerostat® Guardian CR2000 Cleanroom Overhead Ionizing Air Blower

- Class 10 (209E), ISO class 4
- Inherently balanced to ±5 V
- Patented built-in emitter point cleaner
- Emitter points never need replacement

Designed for use above critical cleanroom applications, the CR2000 is a class 10 clean compatible ionizer. The 3-fan unit has an infinitely adjustable airflow from 135 to 270 CFM. The 2-fan unit is adjustable from 90 to 180 CFM. Multiple units can be powered consecutively in a daisy chain manner. The 3-fan unit measures: 42-3/4"L x 4"H x 6-3/4"D and weighs 15 lbs. The 2-fan unit measures: 31-3/4"L x 4"H x 6-3/4"D and weighs 12 lbs.

3-Fan Unit–120VAC, 50/60Hz
No. 709ST8630.....**$995.00**
3-Fan Unit–230VAC, 50/60Hz
No. 709ST8705.....**$995.00**
2-Fan Unit–120VAC, 50/60Hz
No. 709ST8729.....**$845.00**
2-Fan Unit–230VAC, 50/60Hz
No. 709ST8730.....**$845.00**

SIMCO
An Illinois Tool Works Company

Aerostat® PC™ – Personal Coverage Ionizing Air Blower

Best Seller

- Inherently balanced to 0 (±5 V)
- Built-in emitter point cleaner
- Variable speed fan and integrated heater
- Emitter points never need replacement

Small, quiet, and lightweight, yet uncompromising in performance, The SIMCO Aerostat® PC™ provides superior static charge decay over a targeted work surface area. It provides optimum protection from the destructive effects of ESD & has an integrated heater for operator comfort. Emitter points good for the life of the unit, the PC provides "Maintenance Free" Operation. Produces air volume from 35 to 70 CFM. **Specs:** Discharge time: <2 sec. at 12". The PC covers a 1' x 5' area; Measures 5.5"W x 8.625"H x 3.25"D; weight 5.3 lbs. **(USA)**

No. 709ST0005 120 VAC **$495.00**

Air Filter Retainer
No. 709ST017 ..**$12.15**

Air Filter (Pk. of 6)
No. 709ST810 ..**$18.21**

PC2 Benchtop Ionizing Air Blower

New!

- Universal voltages input (100 - 240V)
- Fast, easy maintenance
- Integrated emitter point cleaner
- LED status/alarm lights

LED indicators monitor emitters and tell you when they need service before they affect ion output. Indicators also alert you to problems with power, ion output, ion balance, system faults, and stalled fans. This state-of-the-art benchtop ionizer uses microprocessor and SSDC corona ion technology to protect your most sensitive components. The microprocessor controls the ion balance via an internal sensor to ±3 volts and offers the option of connecting to a remote sensor which maintains ion balance to ±1 volt at the target location. Variable speed fan produces air volume of up to 150 CFM. Dimensions: 6"W x 7.8"H x 3.5"D.

PC2 Benchtop Ionizing Air Blower
No. 709ST2022.....**$650.00**

Air Filter Replacement (6/Pk)
No. 709ST415.....**$15.00**

Air Filter Retainer
No. 709ST525.....**$10.00**

minION 2™ Ionizing Air Blower

- Compact design
- Self-Balancing to ±10V

Steady-state DC corona ion technology with patented radical ion emitter controls electrostatic discharges in sensitive areas that required fast discharges time. Modular wiring allows daisy chaining up to 3 units from one standard power supply. Can also be hard wired. **Specs:** Covers 1' x 4' area, fan adjustable from 21-42 CFM; Just 1.1 lbs.; Discharge time 1000V-100V <2 sec.; Measures: 3-7/8"W x 5-3/8"H x 2-3/8"D. 24 VDC input. Optional clamp-on spring arm stand elevates unit.

110/120VAC to 24VDC power supply
No. 709ST6000 .....**$449.00**

230VAC to 24VDC power supply
No. 709ST7000 .....**$450.00**

Slave Unit (no power supply)
No. 709ST6001 .....**$395.00**

Articulated Arm Kit
No. 709ST6002 .....**$145.70**

Centurion Cleanroom Benchtop Ionizing Blower

Single fan, bipolar corona DC ionizer for critical cleanroom applications to Class 10, ISO Class 4. Delivers superior balance of ±3 volts through an internal closed loop feedback method. Airflow is adjustable from 50 to 90 CFM. Universal power input and IEC style power cords let you connect to any standard 110V to 240VAC outlet. Covers 1 ft x 4 ft area.

No. 709ST9408 .....**$595.00**

Aerostat® XC™ – Extended Coverage Ionizing Air Blower

- Inherently balanced to 0 (±5 V)
- Built-in emitter point cleaner
- Integrated heater & 3-speed fan
- Emitter points never need replacement

The Aerostat XC™ provides excellent coverage, stability of balance, and rapid static charge decay times. The XC neutralizes static across an entire 3' x 6' benchtop area and has an integrated heater for operator comfort. Featuring, Inherent balance technology, Built in emitter point cleaner, & Emitter points good for the life of the unit, the XC provides "Maintenance Free" Operation. Three speed fan delivers a controlled air volume of 70, 95, or 120 CFM. **Specs:** Discharge time: <2 sec. at 12". Measures 15-3/8"W x 4-1/2"H x 8-1/8"D; Weight: 17.5 lbs. **(USA)**

No. 709ST0002 120 VAC **$615.00**
No. 709ST667 230 VAC.....**$625.00**

XC™ pedestal mount
No. 709ST282 .....**$71.65**

Air filter kit
No. 709ST281 .....**$64.95**

Replacement air filter
No. 709ST059 .....**$19.43**

TECHNI-STAT

Benchtop Ionizer

Steady-state DC ionizer with sense feedback balancing designed for fast discharge times. Sealed thru-tunnel air flow design combines with non-shedding fan for Class 100 rating. Easy to disassemble and clean. Voltage offset controlled to ±3% volts. Audible and visual balance and maintenance required indicators. **(USA)**

No. 758ST4020.....**$450.00**

TECHNI-STAT

VSE 3000 Self Balancing Static Eliminator

Best Seller

- Self-balancing for 0 ±5V balance
- Integrated heater & variable speed fan
- Removable emitter assembly for fast cleaning
- Emitter points never need replacement

An efficient workstation ionizer which effectively eliminates electrostatic charges quickly and reliably. Produces an air volume of 80 to 160 CFM and floods the entire workstation with static eliminating ions. Its patented self-balancing circuitry maintains a balance of 0±5V & an individually controlled heater provides operator comfort. **Specs:** Discharge time: 1000V to 100V in <2 sec. Measures 12"W x 6.25"H x 10"D. **(USA)**

No. 758ST3300 115V **$515.00**
No. 758ST302 230V **$535.00**

TECHNI-TOOL
Tomorrow's Products Shipped Today
Phone: 1-800-832-4866 or 1-610-941-2400

Benchtop Ionizers

Air Ionizer 963

3M

Blanket your benchtop with ionized air to help prevent static from damaging sensitive electronics. Fast neutralization of static charges on non-conductive objects (<1 second at 1' distance). Maintains equal balance of positive-negative ions. Also features two-speed fans and static-dissipative housing. **Includes:** Ionizer and Power cord.

120V AC Air Ionizer with power cord (963)
No. 780ST961 .....**$513.98**
100V to 240V Ionizer with power transformer (963E)
No. 105ST963 .....**$470.30**

Mini Air Ionizer 960

3M

Small and versatile for local area ionization or on ESD workstations. Maintains balanced flow (±20V) of ionized air. Steady-state DC ion emission for efficient ion delivery. **Includes:** Ionizer, Mounting bracket and 3' Wall transformer cable.
(Wall transformer sold separately.)
Mini Air Ionizer (960)
No. 105ST960 .....**$482.27**
Wall Transformer (960X/980X)
No. 105ST961 .....**$51.42**

Ionizing Guns

3M Ionized Air Gun 980

Best Seller

Excellent tool for blowing particulate contamination off any surface. A charge of 1000V is reduced to less than 100V in less than a second. The 980 is completely self-balancing, no adjustment or calibration is needed. It maintains balance to within ±30V of 0V (at a distance of 6"). The air line filter and the emitter points at the tip of the hand unit, are the only replaceable parts and can be changed in just seconds without any special tools. A 7' flexible hose connects the air gun to the console. The console, air gun and hose are made of static dissipative material.

No. 105ST900 (110V Air Gun) **$947.90**
No. 105ST9801 (220V Air Gun) **$975.38**
No. 105ST961 Wall transformer **$51.42**
No. 105ST902 Air filter (3/Pk.) **$113.11**

TECHNI-STAT PulseGun™ 5 Kit

Designed for cleaning and assembly applications where constant or extended usage is required. Its powerful, focused gas/air flow rapidly neutralizes static charges while blowing off dust and contaminating particles attracted to the product surface. Specs: Discharge time: <2 sec. at 6"; Cable connector: 7'; gas tube: 1/4" OD, 3/16" ID polyurethane; Air/gas supply: Inlet pressure 5 PSI min, 100 PSI max. Supplied with airflow controller. 120 VAC. **(USA)**
No. 758ST870 Kit **$630.00**

Ionizing Guns & Compact Ionizing Bar

SIMCO — An Illinois Tool Works Company

Best Seller

Top Gun™ – Ionizing Air Gun

- Electronically balanced to 0 (±15V)
- Operates on compressed air or nitrogen
- Adjustable airflow control (5 to 100 PSI)
- Emitter point never needs replacement

The SIMCO Top Gun™ is a high-performance ionizing air gun for electronics manufacturing and cleanroom applications. Balanced to 0±15V, the Top Gun™ features high blow-off force of up to 100PSI to provide efficient cleaning and rapid static charge decay. The gun body is static dissipative, lightweight (less than 7oz) but durable and features a light-touch trigger. All control functions are built into the gun for easy operator use: airflow control, ion balance adjustment, and a two-level LED to indicate both power and ionization. The Top Gun™ features, Inherent balance, and an emitter point good for the life of the unit, for "maintenance free" operation. **Specs:** Discharge time: <1.3 sec. at 6". **(USA)**

7' Cable; 120 VAC
No. 709ST0003.....**$775.00**
7' Cable; 230 VAC
No. 709ST106.....**$810.00**

Replacement air filters - 2/pk
No. 709ST505.....**$75.30**

SIMCO — An Illinois Tool Works Company

Hands-Free Operation, Flexible Positioning!

OrION™ Sidekick

709ST0004

SIMCO orION™ static neutralizing blow-off gun with choice of foot control or photoelectric on/off switch provides high performance and reliability in a compact, compressed-air nozzle. The high blow-off force quickly removes electrostatic surface charges from sensitive products, while an easy-to-replace 0.01 micro particle filter at nozzle end and flexible gun mount ensure clean air is always delivered exactly where it's needed. Balance is self-maintained at better than 0+15 volts. Includes bracket for easy benchtop mounting. 120V.

OrION™ w/Sidekick Foot Control
Pedal controls both ionization and airflow, reducing compressed air costs.
No. 709ST0004 .....**$865.00**

New!

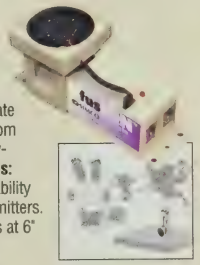
709ST2205

OrION™ w/Sidekick Photoelectric Switch
For automated assembly operations and/or hands-free operation. Switch activates gun when object is in 1"-24" range (adjustable).
No. 709ST2205.....**$1,245.00**

SIMCO — An Illinois Tool Works Company

Small enough to fit any scope!

Compact Ionizing Bar



Bi-polar air ionizer ideal for applications with space constraints and low clearance. Simple to install, operate and maintain. Multiple units can be linked together from one 24VDC power source allowing 5 units to be daisy-chained. A 24 VDC power supply is included. **Features:** Auto balancing (DOCC); System integration with capability to remotely monitor; Class 1 Cleanroom Grade SiC emitters. **Specs:** Discharge time: ±1.000 - ±100V < 15 seconds at 6" (15.2cm); Dimensions: 1.3" x 2.0" x 3.5".

With Sic Class 1 Emitters
No. 709ST446 .....**$750.00**
With TG Tungsten Emitters
No. 709ST577 .....**$650.00**

Fan Assembly
No. 709ST447 .....**$75.00**
Power Supply
No. 709ST448 .....**$69.00**

Pump Dispensers

TECHNI-STAT

I.C. ESD Solvent Bottles

Best Seller

Pump top bottles are perfect where contamination is a concern. Made for clean environments. One-handed operation. Made of molded polyethylene which doesn't react with such solvents as TCE or alcohol. Three pump varieties to suit your needs: stainless steel *One-Touch Pump* has an airtight valve; the *Pure-Touch Pump* protects contents from cross contamination by keeping fluid from returning to dispenser; and leakproof *Take-Along Pump* is perfect for travel. **Specs:** Resistance: 1 x 10^9 to 1x$10^{10}\Omega$/sq.; Static Decay: 5000V in <2 sec. @ 10% R.H. **(USA)**

Solvent bottle - no lid
No. 758ST0006 6 oz. **$3.85**

A. One-Touch Pump Top Bottle
No. 758ST447 4 oz. **$15.30**
No. 758ST448 6 oz. **$15.30**
No. 758ST449 8 oz. **$15.30**

B. Pure-Touch Pump Top Bottle
No. 758ST444 4 oz. **$17.96**
No. 758ST445 6 oz. **$17.96**
No. 758ST446 8 oz. **$17.96**

C. Take-Along Lock Top Bottle
No. 758ST450 4 oz. **$17.80**
No. 758ST455 6 oz.. .....**$17.80**
No. 758ST456 8 oz. **$17.80**

MENDA

One-touch Yellow ESD Solvent Bottle

Flask shape solvent bottle permanently dissipative. RTG: 10E9 ohms. One-touch pump. Yellow HDPE, 6 oz.
No. 548CH354 .....**$16.85**

Green Dissipative Bottle With One-Touch Pump

Green 6oz. bottle ideal for lead-free ESD areas. Permanently dissipative with no migratory additives. RTG = 10E9 ohms.
No. 548CH772 .....**$17.70**

MENDA

Amber Glass Dispenser Bottle

Made in USA

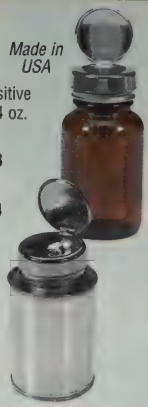
Protects light and plastic sensitive fluids. Stainless steel pump. 4 oz.

One-Touch Pump Top
No. 548SO324 .....**$15.48**

Pure-Touch Pump Top
No. 548CH112 .....**$18.14**

Steel Solvent Container

Used when strength and durability are important. Allows storage of fluid not compatible with plastic. 4 oz.
No. 548SO022 .....**$17.51**



MENDA

HDPE w/Plastic Pump

Protects light and plastic sensitive fluids. Allows easy viewing of fluid and reduces odor. 8 oz.

Lasting-Touch Top
No. 548SO014 .....**$6.69**

Conductive HDPE Bottle

Permanently conductive, with carbon black HDPE additive. **Specs:** Resistivity: 1 x 10^2 to 1 x 10^6 Ω/sq.; 6 oz. bottle. *Meets MIL-STD-81705B.* **(USA)**
One-Touch Pump Top
No. 548PR056 .....**$17.39**
Pure-Touch Pump Top
No. 548CH530 .....**$20.20**
Take-Along Pump Top
No. 548CH717 .....**$22.03**

Wash/Dispensing Bottles

TECHNI-TOOL

A. Wash/Solvent Dispenser

Polyethylene solvent bottle features a special 6" long closure activated dispensing tube. 2 oz. **(USA)**
No. 604PR010 .....**$4.50**

B. Squeeze Bottle

For lab or field dispensing of cleaning agents, water, etc. Linear polyethylene with non-leak top. Flat bottle. 6"L x 3-1/4"W x 1-1/2"D thick. 8 oz. **(USA)**
No. 152PR012 .....**$3.02**

C. Wide-Mouth LDPE Wash Bottle

Closure designed for leakproof service. Delivery tube molded into product wall. 750-ml size.
No. 780PR765 ..**$43.28 /4 Pk.**

Clean Room Safe Static Dissipative Bottles

Molded polyethylene water bottles with 90 degree stem molded in contains no Exthoxylated Tertiary Amine. Will dissipate a static charge of ± 5000V in less than two seconds at 40% RH. **Specs.:** Average surface resistivity: 10^3 to $10^{10}\Omega$/sq.
No. 674CH800 8 oz. **$7.06**
No. 674CH016 16 oz. **$7.23**

Color Coded Wash Bottles

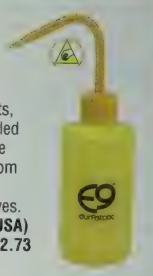
Leak-proof Polyethylene dispensing bottles. 3 colors per pack: Red, Blue and Yellow. **(USA)**
No. 631PR010 ..**$18.14 /Pk.**

A. 500mL: Blue Cap Bottle
No. 186PR615 .....**$6.72**
B. 500mL: Red Cap Bottle
No. 186PR613 .....**$6.72**
C. 500mL: Yellow Cap Bottle
No. 186PR614 .....**$6.72**

MENDA

Yellow Dissipative ESD Protective Wash Bottles

Controlled delivery of solvents, cleaners, water and oils. Angled non-drip spout delivers single drop or fine stream. Made from HDPE E9™ Durastatic™ and contains no migratory additives. **Specs:** RTG: 1 x $10^9\Omega$/sq. **(USA)**
No. 548CH359 8 oz. **$12.73**



PLATO

Plato®-Stat Dispensing Bottle

8 oz. Bottle and nozzle.
No. 657ST250.....**$12.36**

Wash Bottle

8 oz Wash Bottle
No. 674ST003.....**$6.55**
16 oz Wash Bottle
No. 674ST0016 ....**$7.06**

Brush Dispensers

TECHNI-TOOL

Brush Dispenser

Fast Seller

Round 1/2 oz. glass bottle has plastic cap with brush applicator. **(USA)**
No. 758PR024 .....**$1.35**

PLATO

Plato®-Stat Brush Dispenser

Durable, soft, natural horse hair brush on 2 oz. bottle. Static dissipative jacket. for general cleaning and flux removal. *MIL-STD-2000.*
No. 657PR210 .....**$15.67**

Weller

Scrub-It™ Solvent Dispenser

Transparent 2 oz. polyethylene bottle shows solvent level at all times. 1/2 inch horsehair stiff bristle brush is long lasting. Compatible with all common solvents. **(USA)**
No. 314SO024.....**$10.13**

Static Dissipative Bottles

Bottles dissipate charge of +5000 volts in less than two seconds at 40% R.H. Surface Resistivity: 10^9-10^{10} Ω/Sq. Static decay: 5kV to 0.0 kV (FTS 101/.4046) <1.0 Sec.
2 oz. Flux Dispenser w/Pen Tip
No. 674ST009.....**$6.55**
2 oz. Flux Dispenser w/Brush Tip
No. 674ST900.....**$7.48**

Spray Dispensers

Clean Room Safe

Static Dissipative Bottles

Molded polyethylene spray mister bottles. Dissipate a static charge of ± 5000V in less than two seconds at 40% RH.
Specs.: Average surface resistivity: 10^9 to 10^{10} Ω/sq.

A. 16 oz. ESD Spray bottle
No. 674ST018 .....**$10.20**
32 oz. ESD Spray Bottle
No. 674ST019 .....**$10.20**

Global Reach + Local Focus = THE COMPLETE SOLUTION
TECHNI-TOOL

Flux Dispensers

TECHNI-TOOL

Flux Dispenser

Fast Seller

Apply just one drop of flux with no spillage!
1" long needle is maintenance-free, always ready for dispensing. Self-standing, non-spill 2 oz. bottle is 5" high to tip of needle. 20 Ga., .035 O.D. **(USA)**
No. 758CH121.....**$1.80**

TECHNI-TOOL

Great Little Dispenser Bottle

For dispensing a variety of liquids. Long needle nose makes it handy for all those hard-to-get places. Easily refillable, leak-proof cap and scabbard. Needle: 1-1/4"; Bottle: 3-3/4" OAL. **(USA)**
No. 758CH011 .....**$3.14**

TECHNI-TOOL

Assembly LDPE Dispenser Bottle

2 oz. dispenser bottle with luer lock-style cap lets you change needles without taking the cap off. **(USA)**
No. 758CH8352 .....**$3.50**

PLATO New!

Flux and Liquid Dispensers

Dispense precise amounts of liquid without dripping or waste. **Specs (ESD Version):** Resistivity: 1 x 10^7 to 1 x 10^9Ω/sq.; Static Decay: 5kV to.5kV in 0.02 sec.; Capacity: 2 oz.; Needle Tip Length: 1".

ESD, .010" tip diameter
A. No. 657ST010 .....**$7.93**

Non-ESD, .010" tip diameter
B. No. 657CH021 .....**$3.77**

ESD, .020" tip diameter
C. No. 657ST020 .....**$7.93**

Non-ESD, .020" tip diameter
D. No. 657CH020.....**$3.77**

Dispenser Bottles

Resistance: 1 x 10^9 to 1 x 10^{11}Ω/sq. Will dissipate a charge of ±5kV in less than one second at 40% RH.

A. Small 2 oz. Flux Bottle w/#1 Needle (26 AWG)
No. 674ST001.....**$6.55**
B. Small 2 oz. Flux Bottle w/#2 Needle (20 AWG)
No. 674ST002 2 oz.....**$6.55**
C. Small 2 oz. Flux Bottle w/#3 Needle (16 AWG)
No. 674PR612 2 oz.....**$6.55**

ESD Hand Lotions

The only hand lotion with a military spec. written around it!

I.C. Hand Lotion

Developed exclusively for the electronics industry, I.C. lotion contains no silicone, lanolin, mineral oil or other types of ingredients commonly found in hand care products that can contaminate PC boards and adversely affect solderability. In addition, the lotion also creates a moisture layer that assist in static discharge.

I.C. Static Dissipative Hand Lotion – Blue and Green for Lead-Free Areas

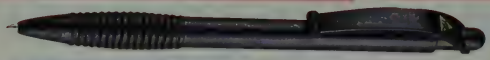
- Static Dissipative - better contact between wrist strap & skin
- Enriched with Aloe Vera and Vitamins A, D, and E
- Non Contaminating, No Glycerin, Mineral Oil, Silicones or Lanolin
- Non-greasy

Type	I.C. Static Dissipative Hand Lotion	PRICE
1 oz. - Blue	A. 674CH602	$2.82
8 oz. - Blue	B. 674CH008	$4.26
8 oz. - Green	C. 674ST999	$5.06
8 oz. ESD Bottle - Blue	D. 674CH604	$6.13
16 oz. ESD Bottle - Blue	E. 674CH606	$11.05
32 oz. with Pump - Blue	F. 674CH608	$14.46
Wall Bracket	G. 674PR034	$32.73
1 Gallon Bottle - Blue	H. 674CH001	$39.95

TECHSPRAY RoHS Compliant

Zero Charge® Anti-Static Hand Lotion

This specially formulated lotion improves the contact between personnel and grounding devices, such as wrist and heel straps. Enriched with Aloe Vera and Vitamins A and E. Penetrates rapidly leaving your skin soft and non-greasy. Contains no Silicone, Lanolin, Squalene, or similar materials found in conventional hand lotions that can interfere with PCB manufacturing. **(USA)**
8 oz. Finger pump
No. 754AE112 .....**$6.45**
One gallon (Not Shown)
No. 754CH170 .....**$52.96**



TECHNI-STAT

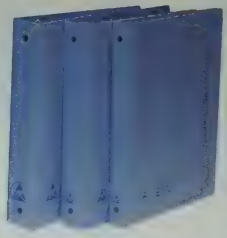
Dissipative Ball Point Pen

Use this pen in ESD-areas or anywhere. Made from black dissipative plastic. Blue ink cartridge. (Germany)
No. 758ST123 .....**$5.50**

TECHNI-STAT

Static Dissipative Binders

Standard blue, 3-ring binder with reaching hand symbol.
Specs: Resistivity: 10^9 to $10^{11}\Omega$/sq.; Vinyl: 16 MIL; Size: 11-1/2"H x 12-1/4"W.
(Other Colors Available)



1/2" Ring, 1-1/2" Spine
No. 758ST7405.....**$20.73**
1" Ring, 1-1/2" Spine
No. 758ST323 .....**$20.96**
1-1/2" Ring, 2.3" Spine
No. 758ST315 .....**$22.00**
2" Ring, 2.9" Spine
No. 758ST320 .....**$24.55**
3" Ring, 4.2" Spine
No. 758ST322 .....**$28.55**

TECHNI-STAT

3-Ring Sheet Protectors

A clear, static-dissipative document holder for static sensitive areas.
Specs: Resistivity: 10^9 to $10^{11}\Omega$/sq.; Charge Decay: <0.15 sec.; Material: Polypropylene; Loading: Top.

Holds 8-1/2" x 11" documents.
No. 758ST7143 3 MIL - 5/Pk. .....**$3.51 /Pk.**
No. 758ST7406 6 MIL - 25/Pk. .....**$39.27 /Pk.**
Shop Traveler (No holes):
No. 758ST7412 6 MIL - 25/Pk. .....**$47.13 /Pk.**

Holds 11" x 17" documents.
Drawing Holder: 6 MIL - 25/Pk.
No. 758ST5417 .....**$88.36 /Pk.**

TECHNI-STAT

ESD Clip Board

Static dissipative blue clipboard for static sensitive areas. Heat sealed edges. **Specs:** Resistivity: 10^9 to $10^{10}\Omega$/sq.; Vinyl: 16 MIL; Size: 9" x 12".
No. 758ST602 .....**$22.42**

TECHNI-STAT

Static Dissipative Paper

8-1/2" x 11" Light red strip on edge.
Specs: Resistivity: 5 x 10^7 to 6 x 10^9.
500 sheets.
No. 758ST5115.....**$74.55**

Cleanroom Paper

New!

Synthetic polymer impregnated paper. 23 lb. 8.5" x 11". **250 sheets/ream**

TT No.	Color	PRICE
251AP127	Pink	$14.30
251AP128	White	$14.30

MENDA

Thermal Insulated ESD Drinking Cup

New!

16 oz. double-walled stainless steel insulated drinking cup for hot or cold drinks. Completely grounded. Push-on lid with slide opening.
No. 548ST890 .....**$19.50**

I.C. Sport Bottles

Surface resistivity: 10^9 to $10^{11}\Omega$/sq.
Static Decay: 5kV to 0 in1 sec. **(USA)**
No. 674ST032 (32 oz.) **$10.20**

General Purpose Catch-All

Surface resistivity: 10^9 to$10^{10}\Omega$/sq. Will dissipate a charge of ±5000V in less than two seconds at 40% RH. **(USA)**
No. 674ST016 (16 oz.) **$5.61**

Static Dissipative and Antistatic Rubber Bands

Conductive (Black): $10^6\Omega$/Sq.
4-1/2" x 1/8", Approx. 598/bag
No. 758ST4518.....**$37.40**

Antistatic Bands (Pink): 10^8 to $10^{10}\Omega$/Sq.
3-1/2" x 1/8" Approx. 598/bag
No. 758ST3512.....**$32.00**
5" x 1/4" Approx. 210/bag
No. 758ST5014.....**$32.00**

ESD Safe Wastebasket

New!

Eliminate your charge-generating waste baskets. Corstat wastebaskets are ESD-safe. 14-1/4" x 12-3/4" x 13-5/8".
No. 265ST0112 .....**$15.55**

ESD Trash Can Liner

For use with ESD Waste basket.
Specs: Resistivity: <$10^{12}\Omega$/sq.; Static Decay: 5kV in under 2 sec.; Material: Anti-Static Polyethylene; Thickness: 1.5 MIL; Size: 24" x 34". **50 Bags/Pk.**
No. 106PR076.....**$25.50**

TECHNI-FACT

50 years

Did you know?

Techni-Tool's state-of-the-art headquarters located in the suburbs of Philadelphia includes a 72,000 sq. foot warehouse, full call center, advanced computer systems and more.

Techni-Tool® Gloves and Fingercots

A. RM Dissipative Glove
Ideal for micro-electronics, assembly and packaging. Improved grip and elastic, non-bright processed fabric. 100% polyester, continuous filament knitted with carbon fiber. Delicate, round-tip finishing and surface resistance of 10^9~$10^{10}\Omega$/sq. 10" OAL. **10/Pk.** (Korea)

758AP520 S .....**$38.00/Pk.** **758AP522** L.....**$38.00/Pk.**
758AP521 M .....**$38.00/Pk.** **758AP523** XL .....**$38.00/Pk.**

B. RM N-Flex
Non-slip, silicon-coated surface; elastic, non-bright processed fabric; delicate, round-tip finishing and continuous filament, knitted with a carbon core. 100% cotton lining provides comfort and absorbs sweat. Surface resistance: 10^9~$10^{10}\Omega$/sq. Ideal for micro-electronics and assembly applications. **10 Pairs/Pk.** (Korea)

No. 758AP041 M .....**$45.00/Pk.**
No. 758AP042 L.....**$45.00/Pk.**

C. PVC Dots Dissipative Gloves
Breathable polyester fabric with woven conductive fibers that won't slough off. PVC dots on palm and fingers let you pick up the smallest components. **Specs:** Resistivity: <$10^8\Omega$/sq.; Charge decay time 5000V to 50V: <0.01 secs; RTT resistance: 2 x 10^8-5 x $10^7\Omega$/sq.; Construction back: polyester/carbon filament yarn; Charge decay: <0.1sec. **10 Pairs/Pk.** (Tawain)

No. 758ST821 S.....**$28.54/Pk.**
No. 758ST822 M .....**$28.54/Pk.**
No. 758ST823 L.....**$28.54/Pk.**

D. Utility Gloves - Cotton
An all-purpose glove. 100% soft, premium cotton. Unhemmed hand covering. **12/Pk.**

No. 758AP046 Mens .....**$7.50/Pk.**
No. 758AP047 Womens.....**$7.50/Pk.**

E. Thunderon® ESD Gloves
Molecules of copper sulfide are banded to molecules of acrylic fiber. Superior corona discharge performance, ionizing the air near a material's surface and dissipating electrostatic charge that can damage product. No decrease in performance up to 30 launderings. Ambidextrous. Full finger.

871AP014 S.....**$50.60/doz. pr.** **871AP016** L.....**$50.60/doz. pr.**
871AP015 M.... **$50.60/doz. pr.** **871AP017** XL .. **$50.55/doz. pr.**

Class 100 cleanroom

F. Whizard® Cut Resistant Glove Liner
Abrasion resistant. Combines stainless steel and polyester. Preserves tactile sensitivity. Use as a liner or stand alone. Launderable. Black. Ambidextrous.

871AP018 S ..... **$14.30/pr.** **871AP020** L ..... **$14.30/pr.**
871AP019 M..... **$14.30/pr.** **871AP021** XL ..... **$14.30/pr.**

Cleanroom Fingercots
Specs: 3 MIL; Power-Free; Latex or Nitrile; ISO 5 (Class 100); Textured; Rolled;Nominal 2-3/4" length; Double-bagged; Static shield. **5 Gross/Tray Pk.**

	S	M	L	XL	PRICE
G. Latex	758AP505	758AP506	758AP507	758AP508	$13.70
H. Latex/Anti-Static	758AP180	758AP181	758AP182	758AP183	$19.50
I. Latex/Static-Dissipative	758AP110	758AP112	758AP113	758AP114	$31.95
J. Nitrile/Anti-Static	758AP100	758AP101	758AP102	758AP103	$41.55

General Use/Controlled Environment Fingercots
Specs: 3 MIL; Low-powder or Powder-free; Latex; Textured; Rolled; Nominal 2-3/4" length. **5 Gross/bag.** **10 Gross/bag*

	S	M	L	XL	PRICE
G. Latex - Low powder*	758AP200	758AP201	758AP202	758AP203	$17.40
G. Latex - Powder-free	758AP300	758AP301	758AP302	758AP303	$11.45
H. Latex/Anti-Static - Powder-free	758AP776	758AP777	758AP778	758AP779	$15.85
I. Latex/Static-Dissipative - Powder-free	758AP500	758AP501	758AP502	758AP503	$27.75
Latex/Static Dissipative 4mil	758AP600	758AP601	758AP602	758AP603	$20.65

ESD Hand Lotions

Chemtronics

Hand Guard
Non-greasy, this hand lotion is specially formulated for technicians and minimizes potential for static damage. Contains Aloe Vera and Vitamin E. Emollients penetrate deeply to relieve chapped or chemically-irritated skin. Contains no oils. 8 oz. Pump. **(USA)**

No. 237CH805.....**$8.10**

ACL Staticide. Specialists in Static Control

ESD Hand Lotion
Replenishes the vital moisture on skin that is important to wrist strap performance without risk of contamination.
8 oz. Bottle
No. 106CH7001 .....**$4.25**
1 Gallon (Not Shown)
No. 106CH7002 .....**$46.50**

Non-ESD Guards & Tape

Best Seller

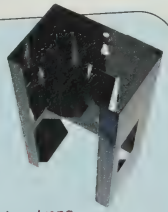
Self-Adhering Gauze Saf-T-Tape®
Tape sticks only to itself – not to the skin. Allows the skin to breathe with no loss of finger sensitivity. Protects against bruises, skin burns, and abrasive surfaces. 3/4" x 30 yds. **16/Pk. (USA)**

No. 583MI075 .....**$22.43/Pk.**
No. 583ST076 .....**$2.41/Ea.**

Split Leather Finger Guards
These finger guards feature an elastic back. **50/Bag. (USA)**

No. 532AP202 S ..**$33.80/Bag**
No. 532AP203 M ..**$33.80/Bag**
No. 532AP204 L....**$33.80/Bag**

New!



QRP® Universal Glove Box Holder
Large magnet provides strong grip and allows for fast and easy vertical or horizontal box positioning. Durable powder coated steel. Spring clip holds all common size dispenser boxes.

No. 659AP001 .....**$27.00**

QRP SPELLS OUT:

RoHS Compliant

- ***Quality*** – ISO-certified manufacturing facilities give you high-quality gloves
- ***Reliability*** – Exclusive glove formulations enhance strength, durability & grip
- ***Performance*** – All gloves exceed ASTM D3578 and D6319 quality standards, and CFR 21 170-199, ASTM F 1671-176 and FDA 1000 ml water leak tests.

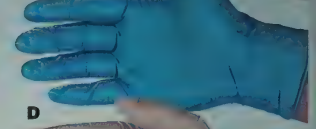
General Purpose Medical Grade Powder-Free Gloves

A. Biotek Textured, Wet/Dry Grip, w/Beaded Cuff

Style	Small	Medium	Large	X-Large	Material	Mil	Length	Qty/Pack	PRICE
609BPF	659AP960	659AP456	659AP457	659AP458	Latex	6 mil	9"	100 ambi	$8.05

B. Qualatex Miracle Grip, Double Polymer Coated, Textured Palm & Fingers, w/Beaded Cuff
Polymer coating inside glove makes it easy to put on and minimizes skin-latex contact. 14 mil gloves provide extra protection for high-risk applications. Powder-free.

Style	Small	Medium	Large	X-Large	Material	Mil	Length	Qty/Pack	PRICE
MG09	659AP051	659AP052	659AP053	659AP054	Latex	6 mil	9"	100 ambi	$8.85
MGHR	659AP060	659AP061	659AP062	659AP063	Blue Latex	14 mil	12"	50 ambi	$13.25



C. Qualatrile Rugged, 100% Synthetic, Textured Palm & Fingers, w/Beaded Cuff
Naturally anti-static, superior snag and puncture resistance plus excellent flexibility and tactile sensitivity. Powder-free.

Style	Small	Medium	Large	X-Large	Material	Mil	Length	Qty/Pack	PRICE
BQF09	659AP201	659AP202	659AP203	659AP204	Blue Nitrile	5 mil	9"	100 ambi	$10.20
BQF12	659AP211	659AP212	659AP213	659AP214	Blue Nitrile	5 mil	12"	100 ambi	$15.25
8BQF09	659AP064	659AP065	659AP066	659AP067	Blue Nitrile	8 mil	9"	50 ambi	$8.95
8BQF12	659AP070	659AP071	659AP072	659AP073	Blue Nitrile	8 mil	12"	50 ambi	$9.45

D. Qualatrile SENS! Tough and Sensitive, 100% Synthetic, Textured Palm and Fingers, w/Beaded Cuff
Exceptional tactile sensitivity with the durability and chemical resistance of nitrile.

Style	Small	Medium	Large	X-Large	Material	Mil	Length	Qty/Pack	PRICE
SQBF09	659AP080	659AP081	659AP082	659AP083	Blue Nitrile	4 mil	9"	100 ambi	$9.10
SQWF09	659AP0092	659AP0091	659AP0093	659AP0094	White Nitrile	4 mil	9"	100 ambi	$9.10

Class 100 ISO 5 Cleanroom and Critical Environment Gloves

E. Qualatex Hi-Pro XC Textured Palm & Fingers w/Beaded Cuff
Consistently low particulates and extractible ion levels.

Style	Small	Medium	Large	X-Large	Material	Mil	Length	Qty/Pack	PRICE
612HC	659AP101	659AP102	659AP103	659AP104	Latex	6 mil	12"	100 ambi	$20.55

F. Qualatrile XC Textured Palm & Fingers w/Beaded Cuff
Naturally anti-static, Consistently low particulates and extractible ion levels.

Style	Small	Medium	Large	X-Large	Material	Mil	Length	Qty/Pack	PRICE
Q095	659AP126	659AP127	659AP128	659AP129	White Nitrile	5 mil	9"	100 ambi	$13.35
Q125	659AP021	659AP022	659AP023	659AP024	White Nitrile	5 mil	12"	100 ambi	$16.55

G. QualaSheer XC Vinyl Gloves, Micro Texture Grip, Extended Beaded Cuff
Naturally anti-static.

Style	Small	Medium	Large	X-Large	Material	Mil	Length	Qty/Pack	PRICE
VHC12	659AP045	659AP046	659AP047	659AP048	Clear Vinyl	6 mil	12"	100 ambi	$13.25

Ansell

Cleanroom Suitable

A. ESD/Clean Room Nitrilite® Silky Ultra-Clean Gloves

Ultra-low particulate and ultra-low extractable glove with exceptional electrical properties. Double bagged and certified Cleanroom 10. Soft flexible properties give great user fit and dexterity, provide long-term comfort and better efficiency. **Specs:** Resistivity: $1x10^{11}\Omega$/sq. at 12.5% humidity (ASTM D257) $1x10^{12}\Omega$/sq at 50% humidity; Static decay: <3 seconds @ 12.5% humidity, <1 second @ 50% humidity. **50 Pairs/Pk. (USA)**

Style	Small	PRICE/Pk.	Medium	PRICE/Pk.	Large	PRICE/Pk.	X-Large	PRICE/Pk.
365758	328PR322	$25.60	328PR323	$25.60	328PR324	$25.60	328PR325	$25.60

Cleanroom Suitable

B. Nitrilite® Gloves

Solve many of the contamination problems in your cleanroom caused by vinyl and latex gloves. Designed specifically for controlled environments. The 100% nitrile minimizes particles, extractables, and other contaminates by the complete absence of silicone, waxes, pigments, fillers, and powder stripping agents. Ideal choice for persons with known or suspected latex sensitivity. **Specs:** 12" length; .40" thickness; 110% nitril ambi; Rolled cuff; Cleanroom compatible; **100 gloves per polybag. (USA)**

Style	Small	PRICE/Pk.	Medium	PRICE/Pk.	Large	PRICE/Pk.	X-Large	PRICE/Pk.
516700	328UN614	$20.60	328UN615	$20.60	328UN616	$20.60	328UN617	$20.60

QRP Specialty Knit Gloves

New!

H. Qualakote ESD Wave Solder Glove

Meets special demands of wave soldering machine operators. Thick enough for heat protection and thin enough for maximum dexterity. 10^8 Ohms surface resistivity. RoHS Compliant.

RoHS Compliant

Style	Small	Medium	Large	X-Large	XX-Large	Material	Resistivity	Length	Qty/Pack	PRICE
PDWS	659AP030	659AP031	659AP032	659AP033	659AP034	Conductive Fiber/ Nitrile Coating	$10^8\Omega$	9"	12 pairs	$64.80

I. Qualakote Anti-Static, Micro-Foamed, Polyurethane Palm Dipped Assembly Glove

Style	Small	Medium	Large	X-Large	XX-Large	Material	Resistivity	Length	Qty/Pack	PRICE
PDESDNY	659AP481	659AP482	659AP483	659AP484	659AP485	Stretch nylon	$10^8\Omega$ and carbon filament yarn	Wrist	12 pairs	$58.35

J. Qualakote Micro Foamed Polyurethane Palm Dipped Assembly Glove

Style	Small	Medium	Large	X-Large	XX-Large	Material	Length	Qty/Pack	PRICE
PDNY	659AP500	659AP501	659AP502	659AP5023	659AP498	White stretch nylon	9"	12 pairs	$23.80
PDGNY	659AP1234	659AP1235	659AP1236	659AP1237	659AP1238	Grey stretch nylon	9"	12 pairs	$23.80

K. Qualagrip Assembly Gloves

Style	Small	Medium	Large	X-Large	XX-Large	Material	Length	Qty/Pack	PRICE
NPDNY	659AP504	659AP505	659AP506	659AP507	–	White nylon, nitrile foam dipped	Wrist	12 pairs	$34.20

L. Knit-Stat™ Anti-Static Assembly Gloves

Style	Small	Medium	Large	X-Large	XX-Large	Material	Resistivity	Length	Qty/Pack	PRICE
KAS	659AP025	659AP026	659AP027	659AP028	659AP029	Stretch nylon	$10^8\Omega$ and carbon filament yarn	10"	12 pairs	$23.80

M. Qualakote Micro Foamed Assembly Gloves

Style	Small	Medium	Large	X-Large	XX-Large	Material	Length	Qty/Pack	PRICE
PPDBNY	659AP037	659AP038	659AP039	659AP040	659AP044	Black nylon, palm polyurethane dipped	Wrist	12 pairs	$23.80
PDBNY	659AP132	659AP133	659AP134	659AP135	659AP136	Black nylon, palm nitrile dipped	Wrist	12 pairs	$34.20

N. Qualakote® CR Cut Resistant Glove – Nitrile Dipped Palm

Style	Small	Medium	Large	X-Large	XX-Large	Material	Length	Qty/Pack	PRICE
PDCR	659AP121	659AP122	659AP123	659AP125	659AP130	White Dyneema	Wrist	12 pairs	$108.15
SPPDCR	659AP138	659AP139	659AP140	659AP141	659AP142	White Dyneema w/Black Nylon	Wrist	12 pairs	$108.15

O. Qualakote® ESD CR Cut Resistant Glove – Nitrile Dipped Palm

Style	Small	Medium	Large	X-Large	XX-Large	Material	Resistivity	Length	Qty/Pack	PRICE
PDESDCR	659AP144	659AP145	659AP146	659AP147	659AP148	White Dyneema	$10^8\Omega$ plus carbon filament yarn	Wrist	12 pairs	$125.30

P. Qualakote® ESD Economy Inspection Glove – Polyurethane Dipped Palm

Style	Small	Medium	Large	X-Large	XX-Large	Material	Length	Qty/Pack	PRICE
PDESDEC	659AP152	659AP153	659AP154	659AP155	–	White stretch nylon	Wrist	12 pairs	$28.10

C. Conform® Natural Rubber Latex Gloves

Ansell

100% natural rubber latex, powder-free, textured grip, 5 mil, Class I medical device. Caution: Contains natural rubber which may cause an allergic reaction. Natural yellow. **100 Gloves/Pk.** (Malaysia)

Style	Small	PRICE/Pk.	Medium	PRICE/Pk.	Large	PRICE/Pk.	X-Large	PRICE/Pk.
516700	328PR702	$16.56	328PR318	$16.56	328PR319	$16.56	328PR320	$16.56

D. Hyflex® Foam ESD Gloves

Best Seller

HyFlex® ESD gloves include a knitted liner containing 30% X-Static fiber. In-use resistance is less than 1MΩ and its decay time is less than 0.1 second. **Specs:** Liner resistivity: <0.001MΩ/sq.; Palm coating: 39MΩ/sq. **12 Pairs/Pk. (USA)**

Style	Size 7	PRICE/Pk.	Size 8	PRICE/Pk.	Size 9	PRICE/Pk.	Size 10	PRICE/Pk.
205590	328PR107	$126.48	328PR108	$126.48	328PR109	$126.48	328PR110	$126.48

NEED HAND LOTIONS? For ESD Hand Guards and Pre-glove Hand Lotions see pages 169 & 174.
Don't see what you want call us at **800-832-4866**!

Lab Coats and Jackets

ECX-500 (Econoshield) medium-weight fabric is made of 98% polyester, 2% carbon thread, 3 oz/sq. yard. Available in Blue & White.
OFX-100 lightweight fabric is made of 87% polyester, 13% carbon thread, 2.3 oz/sq. yard. Available in Blue, White, Teal & Burgundy.
IVX-400 medium-weight fabric is made of 93% polyester, 7% carbon thread, 4 oz/sq. yard. Available in Royal Blue and custom colors.
ESD grid-knit cuffs form contact points at both wrists without tethering the wrists; All garments come standard with three pockets ***AND ARE MADE IN THE USA!***

Traditional Lab Jacket

Best Seller

- OFX-100 Lightweight Fabric
- 87% Polyester, 13% Carbon Thread
- Lapel Collar
- Set In Style Sleeves

A. Traditional Lab Jacket - Waist Length

TT No.	Color	Size	PRICE
766AP4042	White	S	$41.40
766AP4043	White	M	$41.40
766AP4044	White	L	$41.40
766AP4045	White	XL	$39.10
766AP4046	White	XXL	$49.68
766AP4047	White	XXXL	$49.68
766AP4048	White	4XL	$49.68
766AP4049	Blue	S	$41.40
766AP4050	Blue	M	$41.40
766AP4051	Blue	L	$41.40
766AP4052	Blue	XL	$41.40
766AP4053	Blue	XXL	$49.68
766AP4054	Blue	XXXL	$49.68
766AP4055	Blue	4XL	$49.68
766AP4056	Burgundy	S	$41.40
766AP4057	Burgundy	M	$41.40
766AP4058	Burgundy	L	$41.40
766AP4059	Burgundy	XL	$41.40
766AP4060	Burgundy	XXL	$49.68
766AP4061	Burgundy	XXXL	$49.68
766AP4062	Burgundy	4XL	$49.68

B. Traditional Lab Coat - Knee Length

TT No.	Color	Size	PRICE
766AP4000	White	S	$46.80
766AP4001	White	M	$46.80
766AP4002	White	L	$46.80
766AP4003	White	XL	$46.80
766AP4004	White	XXL	$56.16
766AP4005	White	XXXL	$56.16
766AP4006	White	4XL	$56.16
766AP4007	Blue	S	$46.80
766AP4008	Blue	M	$46.80
766AP4009	Blue	L	$46.80
766AP4010	Blue	XL	$46.80
766AP4011	Blue	XXL	$56.16
766AP4012	Blue	XXXL	$56.16
766AP4013	Blue	4XL	$56.16
766AP4014	Teal	S	$46.80
766AP4015	Teal	M	$46.80
766AP4016	Teal	L	$46.80
766AP4017	Teal	XL	$46.80
766AP4018	Teal	XXL	$56.16
766AP4019	Teal	XXXL	$56.16
766AP4020	Teal	4XL	$56.16

Traditional Lab Coat - Knee Length

- IVX-400 Medium Weight Fabric
- 93% Polyester, 7% Carbon Thread
- Lapel Collar
- Set In Style Sleeves

TT No.	Color	Size	PRICE
766AP4021	Royal Blue	S	$50.40
766AP4022	Royal Blue	M	$50.40
766AP4023	Royal Blue	L	$50.40
766AP4024	Royal Blue	XL	$50.40
766AP4025	Royal Blue	XXL	$60.48
766AP4026	Royal Blue	XXXL	$60.48
766AP4027	Royal Blue	4XL	$60.48

C. Traditional Lab Jacket - Waist Length with Key Option

Grounding garment with 1/8" female snap on sleeve for wrist strap and ground cord connection on hip pockets.

TT No.	Color	Size	PRICE
766AP4070	Blue	S	$43.20
766AP4071	Blue	M	$43.20
766AP4072	Blue	L	$43.20
766AP4073	Blue	XL	$43.20
766AP4074	Blue	XXL	$51.48
766AP4075	Blue	XXXL	$51.48

Procedure Mask

Soft, cool and breathable face mask with ear loops sonically welded to the outside of the mask. Latex free. Meets ASTM F2100-01 testing requirements. Blue. **(USA)**
No. 251AP075 (15111).....**$7.55**/Box of 50

Econo$hield™ 3/4 Length Smock

Best Seller

Front closure and wrist-adjustment snaps powder-coated to match the fabric.

- ECX-500 Medium Weight Fabric
- 98% Polyester, 2% Carbon Thread
- Lapel Collar
- Set In Style Sleeves

TT No.	Color	Size	PRICE
766AP1000	Blue	XS	$32.40
766AP1001	Blue	S	$32.40
766AP1002	Blue	M	$32.40
766AP1003	Blue	L	$32.40
766AP1004	Blue	XL	$32.40
766AP1005	Blue	XXL	$38.88
766AP1006	Blue	XXXL	$38.88
766AP1007	Blue	4XL	$38.88
766AP1008	Blue	5XL	$38.88
766AP1009	White	XS	$32.40
766AP1010	White	S	$32.40
766AP1011	White	M	$32.40
766AP1012	White	L	$32.40
766AP1013	White	XL	$32.40
766AP1014	White	XXL	$38.88
766AP1015	White	XXXL	$38.88
766AP1016	White	4XL	$38.88
766AP1017	White	5XL	$38.88

V-Neck Lab Jacket

- OFX-100 Lightweight Fabric
- 87% Polyester, 13% Carbon Thread
- Set In Style Sleeves

V-Neck Lab Jacket with Cuffs Shown

V-Neck Lab Jacket - Waist Length

TT No.	Color	Size	PRICE
766AP5000	Blue	S	$39.60
766AP5001	Blue	M	$39.60
766AP5002	Blue	L	$39.60
766AP5003	Blue	XL	$39.60
766AP5004	Blue	XXL	$47.52
766AP5005	Blue	XXXL	$47.52
766AP5006	Blue	4XL	$47.52

V-Neck Lab Jacket - Waist Length w/ESD Grid Knit Cuffs

TT No.	Color	Size	PRICE
766AP5007	Blue	S	$46.80
766AP5008	Blue	M	$46.80
766AP5009	Blue	L	$46.80
766AP5010	Blue	XL	$46.80
766AP5011	Blue	XXL	$54.72
766AP5012	Blue	XXXL	$54.72
766AP5013	Blue	4XL	$54.72

Hallmark Jacket

- OFX-100 Lightweight Fabric
- 87% Polyester, 13% Carbon Thread
- ESD Grid Knit Cuffs
- Raglan Style Sleeves
- Ground Cord Snap on Hip Pocket for Hands-Free Grounding

Hallmark Jacket - Waist Length

TT No.	Color	Size	PRICE
766AP3000	Blue	S	$50.40
766AP3001	Blue	M	$50.40
766AP3002	Blue	L	$50.40
766AP3003	Blue	XL	$50.40
766AP3004	Blue	XXL	$60.48
766AP3005	Blue	XXXL	$60.48
766AP3006	Blue	4XL	$60.48
766AP3007	Teal	S	$50.40
766AP3008	Teal	M	$50.40
766AP3009	Teal	L	$50.40
766AP3010	Teal	XL	$50.40
766AP3011	Teal	XXL	$60.48
766AP3012	Teal	XXXL	$60.48
766AP3013	Teal	4XL	$60.48
766AP3014	Burgundy	S	$50.40
766AP3015	Burgundy	M	$50.40
766AP3016	Burgundy	L	$50.40
766AP3017	Burgundy	XL	$50.40
766AP3018	Burgundy	XXL	$60.48
766AP3019	Burgundy	XXXL	$60.48
766AP3020	Burgundy	4XL	$60.48

Hallmark Lab Coat - Knee Length

TT No.	Color	Size	PRICE
766AP3021	Blue	S	$54.00
766AP3022	Blue	M	$54.00
766AP3023	Blue	L	$54.00
766AP3024	Blue	XL	$54.00
766AP3025	Blue	XXL	$64.80
766AP3026	Blue	XXXL	$64.80
766AP3027	Blue	4XL	$64.80

Hallmark Lab Jacket - Waist Length

- IVX-400 Medium Weight Fabric
- 93% Polyester, 7 % Carbon Thread
- ESD Grid Knit Cuffs
- Raglan Style Sleeves
- Ground Cord Snap on Hip Pocket

TT No.	Color	Size	PRICE
766AP3028	Royal Blue	S	$54.00
766AP3029	Royal Blue	M	$54.00
766AP3030	Royal Blue	L	$54.00
766AP3031	Royal Blue	XL	$54.00
766AP3032	Royal Blue	XXL	$64.80
766AP3033	Royal Blue	XXXL	$64.80
766AP3034	Royal Blue	4XL	$64.80

WORKLON

Microstat® Lab Coats

Woven 65% polyester, 34% cotton, 1% carbon suffused nylon grid; snap-front closure; man-tailored lapel collar; three patch pockets; and adjustable snaps at wrists. Silica blue or white. (El Salvador)

TT No.	Color	Size	PRICE
362PR4732	Silica Blue	S	$33.20
362PR4733	Silica Blue	M	$33.20
362PR4734	Silica Blue	L	$33.20
362PR473	Silica Blue	XL	$33.20

TT No.	Color	Size	PRICE
362PR4631	White	S	$31.70
362PR4632	White	M	$31.70
362PR4633	White	L	$31.70
362PR4634	White	XL	$31.70

Cleanroom Coveralls

New!

Disposable, comfortable, breathable and lightweight. Full-body protection. Zippered closures, elastic cuffs and ankles. Protects against non-hazardous liquids. Available in either a Microporous material or Polypropylene with or without attached hoods and boots. Color: White; **5/bag.**

Microporous w/attached hood and boots

TT No.	Size	PRICE
251AP131	S	$33.20
251AP132	M	$35.10
251AP133	L	$35.90
251AP134	XL	$36.35
251AP135	XXL	$36.95
251AP136	XXXL	$38.00

Polypropylene with attached boots

TT No.	Size	PRICE
251AP137	S	$8.95
251AP138	M	$9.15
251AP139	L	$9.45
251AP140	XL	$9.95
251AP141	XXL	$10.15
251AP142	XXXL	$10.70

Polypropylene-coated polypropylene

TT No.	Size	PRICE
251AP143	S	$8.35
251AP144	M	$8.65
251AP145	L	$8.95
251AP146	XL	$9.35
251AP147	XXL	$9.95
251AP148	XXXL	$10.80

Cleanroom Caps/Masks

New!

Disposable, comfortable, lightweight. Polypropylene. White. Bouffant cap has covered elastic edge and is available in two sizes and weights. Mask is 3-ply with adjustable flat aluminum nosepiece and knit ear loop. Bacterial and filtrations efficiency greater than 95% at .5 microns.

TT No.	Description	Size	Weight	Qty	PRICE/bag
251AP153	Bouffant cap	21"	14 grams	100 bag	$3.85
251AP112	Bouffant cap	24"	14 grams	100 bag	$4.55
251AP114	Bouffant cap	21"	heavy-duty, 17 grams	100 bag	$4.90
251AP115	Bouffant cap	24"	heavy duty, 17 grams	100 bag	$6.00
251AP126	Mask	7" x 3-1/2'	–	50 bag	$3.30

Cleanroom Nylon Glove Liner

New!

Lightweight, comfortable and breathable. Unisize, White. **12/bag**

TT No.	Style	PRICE
251AP129	Fingerless	$15.55/doz.
251AP130	With fingers	$17.40/doz.

New!

Cleanroon Shoe and Boot Covers

Disposable, lightweight and breathable with elastic cuffs. Assorted styles, sizes and colors available.

TT No.	Size	Color	Qty	PRICE/bag
Shoe covers with non-skid Polypropylene soles				
251AP116	M, 14"	Blue	100 bag	$10.65
251AP117	L, 16'	Blue	100 bag	$11.65
251AP118	XL, 18'	Blue	100 bag	$12.30
Shoe covers with cross-linked Polyethylene, heat-sealed seams, long lasting sole traction				
251AP154	L, 16"	Blue	100 bag	$8.60
251AP119	L, 16"	White	100 bag	$8.60
Shoe cover Polypropylene				
251AP120	L, 16"	Blue	100 bag	$8.80
251AP121	XL, 18"	Blue	100 bag	$9.05
Boot cover Polyethylene coated with non-skid PVC soles, stitched seams				
251AP122	S, 14"	White	20 bag	$12.55
251AP123	M, 16"	White	20 bag	$13.75
251AP124	L, 18"	White	20 bag	$15.80
251AP125	XL, 20"	White	20 bag	$16.45

TECHNI-TOOL Brushes

Economy Brushes

TT No.	Size	PRICE
A. White Bristle Chip Brush, Wood Handle		
758CH1105	1/2" x 1/4" x 1-1/2"	$5.50 - 10/Pk
758CH1110	1" x 5/16" x 1-1/2"	$6.50 - 10/Pk
758CH1121	2" x 5/16" x 1-1/2"	$9.50 - 10/Pk
B. Grey Bristle Chip Brush, Plastic Handle		
758CH1115	1/2" x 1/4" x 1-3/4"	$8.50 - 10/Pk
C. Black Polyester Chip Brush, Plastic Handle		
758CH1405	1/2" x 1/4" x 1-3/4"	$7.00 - 10/Pk
758CH1410	1" x 5/16" x 1-3/4"	$8.00 - 10/Pk
758CH1420	2" x 5/16" x 1-3/4"	$5.75 - 5/Pk
D. Foam Brush, Wood Handle		
758CH1201	1"	$3.50 - 10/Pk
758CH1220	2"	$5.00 - 10/Pk

Mid-Grade Brushes

TT No.	Size	PRICE
E. Black Bristle Brush, Flat Varnish, Handle		
758CH2210	1" x 3/8" x 2"	$5.75 - 5/Pk
758CH2220	2" x 1/2" x 2"	$6.90 - 3/Pk
758CH2230	3" x 1/2" x 2-1/4"	$4.10 - Ea
F. Black Level Polyester Brush, Varnished, Handle		
758CH2510	1" x 7/16" x 2-1/4"	$4.75 - 5/Pk
758CH2520	2" x 9/16" x 2-1/2"	$8.25 - 5/Pk
758CH2530	3" x 11/16" x 2-3/4"	$8.40 - 3/Pk

Best Quality Brushes

TT No.	Size	PRICE
G. White Bristle Brush, Wood Handle		
758CH2522	2" x 9/16" x 2-3/4"	$3.90 - Ea
758CH2523	3" x 11/16" x 3-1/4"	$7.30 - Ea
758CH2524	4" x 7/8" x 3-1/2"	$9.45 - Ea
H. White Bristle Angle Brush, Wood Handle		
758CH1252	2-1/2" x 5/8" x 3"	$6.55 - Ea
I. Tapered Polyester Brush, Wood Handle		
758CH1520	2" x 9/16" x 2-3/4"	$4.45 - Ea
758CH1530	3" x 11/16" x 3-1/4"	$6.65 - Ea
758CH1540	4" x 7/8" x 3-1/2"	$10.80 - Ea
J. Tapered Polyester Angle Brush, Wood Handle		
758CH1525	2-1/2" x 5/8" x 3"	$6.00 - Ea

Brushes

Double-Ended Applicator Brushes

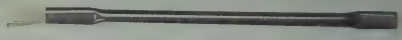
Two sizes. One side has a short flat end and the other side an extra stiff chiseled end. A great alternative to hand-trimming acid brushes.

	TT No.	Fill Material	Trim	Handle (L x Dia.)	PRICE
A	758CH122	Hog bristle	1/4" taper, 1/2" flat	4-1/2" x 3/16"	$8.78
A	758CH005	Horse hair	1/4" taper, 1/2" flat	4-1/2" x 3/16"	$7.93
B	758CH105	.010 Statigo9	1/4" taper, 1/2" flat	4-1/2" x 3/16"	$9.48
B	758CH1010	.010 Statigo9	3/16" taper, 1/4" flat	4-1/2" x 3/8"	$8.18

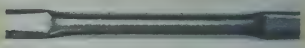
A-Anti-Static, B-Static Dissipative

Dissipative Brushes Nylon

Bristle material is a static dissipative 0.016 nylon that is stiffer than Statigo. Surface resistivity of 10^9. **(USA)**

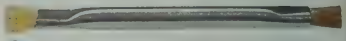


Double ended, for heavy duty scrubbing and reaching tight corners. Stainless steel handle, 4-1/2" OAL, 3/16" dia., bristle trim 1/4" tapered end, 1/2" flat end, stiffness like hog bristle. **(USA)**
No. 758CH1005.....**$9.80**



Zinc plated steel handle, 4-1/2" OAL, 3/8" dia., bristle trim 3/16" tapered end, 1/4" flat end, stiffness like hog bristle. **(USA)**
No. 758CH0010.....**$8.18**

TECHNI-TOOL



Double-Ended Tip Cleaning Brush

Features a sponge on one end for cleaning solder tips, and brass bristles to polish the tips on the other end. **Specs:** Brass trim: 1/2"; 5-1/2" OAL.
No. 758SO656 .....**$9.75**

Technical Cleaning Brushes

A. B.

Heavy-duty metal handle, double-ended cleaning brush. Bristles are fine, anti-static horsehair. **Side A:** 1/4" flat trim. **Side B:** 3/16". Chisel trim. 3/8" diameter handle, 4-1/2" OAL. **(USA)**
No. 758CH032 .....**$6.28**

Applicator Brushes - Stainless Handle

Stainless steel handle for excellent chemical resistance. Manufactured using strong mechanical fiber clamping for maximum fiber retention.

	TT No.	Fill Material	Trim	Handle (L x Dia.)	PRICE
A	415CH299	Goat hair	1/8"	3-1/2" x 1/8""	$6.68
B	758CH209	.010 Statigo9	1/8"	3-1/2" x 1/8""	$7.25
B	758CH609	.010 Statigo9	5/16"	4-3/4" x 3/16""	$8.18
B	758CH231	.016 Nylon	1/8"	3-1/2" x 1/8""	$7.45
B	758CH615	.016 Nylon	5/16"	4-3/4" x 3/16""	$8.18

A-Anti-Static, B-Static Dissipative

Acid Brushes

Handles are heavy-grade tin plate. 3/4" Horsehair bristles. **(USA)**
(Supplied in One Gross Boxes Only.)

No. 872SO014 Size: 1/2" x 6".....**$13.40/Gross**
No. 872SO012 Size: 3/8" x 6" **$14.20/Gross**
No. 872SO010 Size: 1/4" x 6".....**$13.20/Gross**

Insulative Plastic Handle Brushes

An economical water resistant alternative to anti-static brushes. With a surface resistivity of 10^{12}-10^{16} Ω/sq., they are best used in an environment where static is not critical, or where the brush is submerged in liquid when in use. **(USA)**
Use: Applying liquids or fluids, as well as brushing.

TT No.	Fill Material	Trim	Handle (L x Dia.)	PRICE
758PR187	3/16"	3/8"	4-1/2" x 3/16""	$5.53
758CH375	3/8"	3/4"	4-1/2" x 3/8""	$6.60
758PR499	1/2"	1"	4-1/2" x 1/2""	$8.98

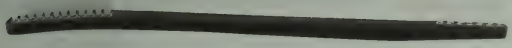
Plastic Handle Brushes

758CH028

Plastic Handle Brushes

Plastic toothbrush style handle, designed with hand grips, and bent to allow knuckle room and prevent hand scraping.

TT No.	Fill Material	Trim	Rows	Handle	PRICE
415CH921	.006 Brass	7/16"	3 x 7	7-3/16" x 7/16"	$1.60
415CH925	.012 Nylon	7/16"	3 x 7	7-3/16" x 7/16"	$1.60
758CH028	.006 Stainless	7/16"	3 x 7	7-3/16" x 7/16"	$1.60

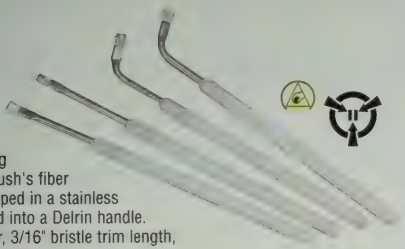


Plastic Handle All-Purpose Brushes

Toothbrush style with a 7" handle that tapers from 7/16" to 3/16", with a brush on each end. Used for cleaning small parts and guns.

TT No.	Fill Material	Trim	Rows	PRICE
415CH399	.012 Nylon	7/16" (with notch)	3 x12	$2.85
	.010 Nylon	1/4" (Tapered end)	1 x 7	

Insulative Instrument Cleaning Brushes



Designed for cleaning in tight areas, the brush's fiber is mechanically clamped in a stainless steel tube, is inserted into a Delrin handle. **Specs:** 1/4" Diameter, 3/16" bristle trim length, 5/16" bristle width. **(USA)**

Use: Clean tight areas including instrumentation.

TT No.	Bristle Material	Handle Length	PRICE
758CH906	Nylon	6" Straight	$11.48
758CH907	Stainless Steel	6" Straight	$11.48
758CH908	Stainless Steel	5-1/4" Bent	$12.40
758CH909	Nylon	5-1/4" Bent	$12.40

Bristle Cleaning Brush

1/2" nylon bristles, 6-5/8" OAL plastic handle. **(USA)**
No. 758CH610 .....**$3.00**

Conductive ESD Brushes

Brushes not only prevent ESD but dissipate it to the ground. Thunderon® bristle fibers. 10^3 to 10^4 Ω/sq. conductivity. Black dissipative polyethylene handles: 10^5 to 10^9 Ω/sq.

Semi-Fine Bristle ESD Brush

Use for electro-opticals, explosives, chemicals, plastics, monitors and photographic sensitive equipment.
No. 758ST7753 1/2" Semi-fine; 5-1/2" OAL.....**$9.10**
No. 758ST7757 2" Semi-fine; 6-1/3" OAL.....**$13.90**
Call for other sizes or bristle strengths.

Hard Round Brush

Designed especially for circuit boards and electronics. Unique conductive fibers (Thunderon®) have excellent corona discharge properties. **(USA)**

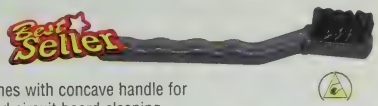
1/4" Hard; 6" OAL.
A. No. 758ST7752.....**$7.45**

1/8" Hard; 4-1/4" OAL.
B. No. 758ST7720.....**$12.90**

Hard Static Brush

Curved, conductive plastic brush for delicate cleaning and scrubbing of boards and more. 4" OAL.
No. 758ST7754 .....**$21.50**

Long Handle Static Brush



Conductive plastic brushes with concave handle for thorough component and circuit board cleaning.
No. 758CH901 6" OAL.....**$9.90**
No. 758CH902 7" OAL **$9.60**

Dissipative Brushes

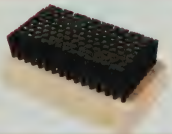
With surface resistivity of 10^5 to 10^{11}, these brushes remove any static charge that will result in the adhesion of particles, such as dust, to an object.

100% Thunderon® bristles, a conductive filament dissipates charges on an electrically charged surface. 9-3/4" OAL, 1/4" width, 1-1/4" trim.
No. 758CH183 .....**$39.40**

100% Thunderon® bristles, a conductive filament dissipates charges on an electrically charged surface. 4" OAL, 1/4" width, 1-1/4" trim.
No. 758CH437 .....**$21.73**

Block Brushes

Fine-Filament ESD Block Brushes



Small easy to grip hardwood block brushes, traditionally used by professional printers and graphic artists. Also very effective at safely cleaning, polishing and deburring easily scratched surfaces.

TT No.	Fill Material	Trim	Rows	Handle	PRICE
415CH131	Brass/Horse hair*	3/4"	10 x 16	2-1/2" x 4-1/4"	$16.93
415CH135	.005 Brass	3/4"	10 x 16	2-1/2" x 4-1/4"	$16.93
415CH137	Horse hair	3/4"	10 x 16	2-1/2" x 4-1/4"	$16.93

**Horse hair border minimizes liquid spray from brass.*

ESD Block Scrub Brush

Clean and dust any ESD-controlled environment with this all natural hand scrub brush. This six row tuft pattern on a hardwood block is excellent when used for large printed circuit board rework cleanup.

TT No.	Fill Material	Trim	Rows	Handle	PRICE
758PR426	Hog bristle	3/4"	6 x 19	7-1/8" x 2-1/4"	$23.53

Artist Brushes

Chemical Resistant Pure Red Sable Round Brushes

Best Seller

Pure red sable hair, ideal for applying conformal coatings, This brush is made to endure harsh chemicals including Toluene without deterioration. Unvarnished hardwood handle.

TT No.	Size	Diameter	Trim	OAL	PRICE
415CH970	3/0	.067"	.236"	7"	$6.70
415CH971	0	.070"	.295"	7"	$7.00
415CH972	1	.077"	.345"	7"	$7.33
415CH973	2	.079"	.433"	7"	$9.13
415CH974	3	.098"	.511"	7-3/8"	$9.85
415CH975	4	.104"	.532"	7-3/8"	$10.95
415CH976	5	.136"	.590"	7-3/8"	$12.28
415CH977	6	.162"	.625"	7-3/8"	$13.78
415CH978	8	.198"	.794"	7-1/2"	$21.65

Pure Red Sable Fine Detail Brushes

Round shaped brush head in small sizes. For applying paint, epoxy, glue or other liquids to tiny, hard to reach areas. 6-3/4" OAL.

TT No.	Size	Diameter	Trim	PRICE
758CH0011	10/0	.039"	.013"	$5.83
758CH0066	6/0	.074"	.196"	$5.38
758CH0044	4/0	.076"	.234"	$5.23
758CH0022	2/0	.078"	.275"	$5.38

Pure Red Sable Round Brushes

Traditional round brush with soft hair.
For applying oils, acrylics and less caustic solutions.

TT No.	Size	Diameter	Trim	OAL	PRICE
758CH0101	1	.077"	.354"	7"	$5.38
758CH0202	2	.079"	.433"	7"	$7.00
758CH0303	3	.098"	.511"	7-3/8"	$7.73
758CH0404	4	.104"	.532"	7-3/8"	$8.75
758CH0505	5	.136"	.590"	7-3/8"	$9.95
758CH0606	6	.162"	.625"	7-3/8"	$11.43

Angular Red Sable Brushes

Ferrules are angled 45° to reach inaccessible areas. 5" OAL. **USA**
No. 296PR026 Fine.....**$3.30** **No. 296PR024** Medium **$3.30**

Lens Cleaning Brushes

Made with soft goat hair, these brushes are excellent for removing dust and dirt particles without scratching lens surface. **(USA)**
No. 758CH050 1/2" .....**$7.30** **No. 758CH090** 1" **$16.13**
No. 758CH075 3/4" **$11.70**

Camel Hair Round Brushes

Great general detail brush that is terrific for painting, adhesive applications and general touch-up work. Wide variety of sizes available.

TT No.	Size	Diameter	Trim	OAL	PRICE
415CH601	1	.078"	3/8"	7"	$3.45
415CH602	2	.094"	3/8"	7"	$3.60
415CH604	4	.158"	1/2"	7-3/8"	$3.90
415CH606	6	.177"	5/8"	7-3/8"	$4.50

Camel Hair Brush

Extra-soft, fine-optics
dusting brush 7/16" wide with 1-1/4" long bristles, round handle. 9" OAL.
No. 872MI028 .....**$7.88**

Chemical Resistant Ox Hair Flat Brushes

Long Ox hair stroke brush is
made to with stand harsh chemicals including Toluene without deterioration. Use in a variety of applications where flat, even application is needed. Ideal for applying conformal coatings. Unvarnished hardwood handle.

TT No.	Size	Trim	OAL	PRICE
415CH6918	1/8"	5/8"	7-1/2"	$6.25
415CH6914	1/4"	3/4"	7-1/2"	$7.80
415CH6938	3/8"	7/8"	7-3/4"	$9.38
415CH6912	1/2"	1"	7-3/4"	$10.80

Soft Oval Sash Brush

Natural hog bristle with bright, tinned ferrule; round sash handle. 1" wide, 1-5/8" thick, 2-1/8" bristle length. 10-1/2" OAL. **(USA)**
No. 872MI020.....**$6.75**

Parts Cleaning Brush

Diameter 1"; tapered, tynex-nylon fill material, bristle length: 2-3/4". 8" OAL. **(USA)**
No. 872MI026.....**$5.80**

Long Brush

Stiff natural hog bristle, width at ferrule: 1/2", brush face: 3/4", trim length: 1-3/4"; 9" OAL.
No. 296PR022 .....**$5.43**

Solder and Scratch Brushes

Metal Bristle Solder Brush

Stainless steel bristles. 2-1/2" long. **(USA)**
No. 480SO020 .....**$13.08** ***10/Pkg.***

FREE ESD and chemical audits – just call 800-832-4866!

EXCELTA CORPORATION Scratch Brushes

New!

Retractable and refillable with plastic handle. Ideal for pre-solder and contact cleaning, and more. 3/8" round brush, 1/8" diameter, 4-3/4" OAL.
Color tint may vary.
No. 352CH266 Steel **$6.33**
No. 352CH267 Fiberglass **$8.59**
No. 352CH268 Nylon **$18.51**
No. 352CH8265 Brass.....**$8.94**

ERASER Adjustable Fiberglass Scratch Brush

Best Seller

Stiff action when brush is retracted; soft action when fully extended. **(USA)**
Fiberglass brush **No. 350PR018** ....**$14.45** Fiberglass refills (25/Pkg) **No. 350PR022** **$81.75**

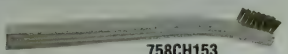
Hand Laced Brushes

Delrin® Handle Hand Laced Brushes

1, 2, or 3 rows hand tied into a Delrin® handle. Autoclavable for cleanroom or sterile applications.
Meets FDA 21 CPR-177, 2480 and ASTM D-6100 standards.

TT No.	Fill Material	Trim	Rows	Handle	PRICE
758PR011	.012 Nylon	7/16"	1 x 11	6-1/4" x 3/16"	$11.85
758PR022	.012 Nylon	7/16"	2 x 11	6-1/4" x 5/16"	$16.00
758PR033	.012 Nylon	7/16"	3 x 11	6-1/4" x 3/8"	$19.83
758PR222	.003 Stainless	7/16"	2 x 11	6-1/4" x 5/16"	$16.00
758PR333	.003 Stainless	7/16"	3 x 11	6-1/4" x 3/8"	$21.73

Plywood Handle Hand Laced Brushes



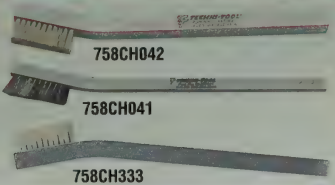
758CH153

Toothbrush-style plywood handle.
Fill material, hand-tied with stainless steel wire, remains secure even when moisture makes wood handle expand and contract.

	TT No.	Fill Material	Trim	Rows	Handle	PRICE
A	415CH151	.006 Brass	7/16"	3 x 7	7-3/4" x 7/16"	$4.18
A	758CH153	.003 Brass	7/16"	3 x 7	7-3/4" x 7/16"	$6.85
A	415PR155	.006 Stainless	7/16"	3 x 7	7-3/4" x 7/16"	$4.18
A	415CH157	.003 Stainless	7/16"	3 x 7	7-3/4" x 7/16"	$7.60

A-Anti-Static, B-Static Dissipative, C-Conductive

Aluminum Handle Hand Laced Brushes



758CH042

758CH041

758CH333

Aluminum handle toothbrush-style scratch brush with 1 or 3 rows of bristles hand-tied into handle for maximum bristle retention.

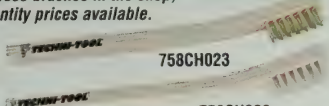
	TT No.	Fill Material	Trim	Rows	Handle	PRICE
A	415CH711	Hog bristle	7/16"	1 x 11	6-7/16" x 1/8"	$12.20
A	415CH783	Hog bristle	7/16"	3 x 11	6-7/16" x 3/8"	$20.78
A	415CH781	Horse hair	7/16"	1 x 11	6-7/16" x 1/8"	$12.20
A	758CH042	Horse hair	7/16"	3 x 11	6-7/16" x 3/8"	$19.00
B	758CH0012	.016 S.D. Nylon*	7/16"	1 x 11	6-7/16" x 1/8"	$14.10
B	758CH0333	.016 S.D. Nylon*	7/16"	3 x 11	6-7/16" x 3/8"	$23.63
C	758CH041	.003 Stainless	7/16"	1 x 11	6-7/16" x 1/8"	$12.83
C	758ST043	.003 Stainless	7/16"	3 x 11	6-7/16" x 3/8"	$20.80
B	758CH111	.010 Statigo9	7/16"	1 x 11	6-7/16" x 1/8"	$14.10
B	758CH333	.010 Statigo9	7/16"	3 x 11	6-7/16" x 3/8"	$23.63
C	758CH211	.008 Titanium	7/16"	1 x 11	6-7/16" x 1/8"	$19.83
C	758CH311	.008 Titanium	7/16"	3 x 11	6-7/16" x 3/8"	$39.05

*A-Anti-Static, B-Static Dissipative, C-Conductive * -Static Dissipative Nylon*

Plywood and Wood Handle Brushes

TECHNI-TOOL® *Use these general purpose brushes in the shop, lab or in the field. Quantity prices available.*

3 Row Plywood Handle Brushes



758CH023

758CH300

All-purpose toothbrush-style, bent for knuckle protection.
This standard tool is the basic brush for every tool kit.

TT No.	Fill Material	Trim	Rows	Handle	PRICE
758CH023	.006 Brass	7/16"	3 x 7	7-3/4" x 7/16"	$1.58
758PR300	Horse hair	7/16"	3 x 7	7-3/4" x 7/16"	$1.58
758CH300	Hog bristle	7/16"	3 x 7	7-3/4" x 7/16"	$2.25
415CH930	.018 Nylon	7/16"	3 x 7	7-3/4" x 7/16"	$1.75
415CH935	.006 Stainless	7/16"	3 x 7	7-3/4" x 7/16"	$1.58

4 Row Plywood Handle Brushes

758PR360

A larger brush with a plywood handle and a bristle material for any surface. Works well for cleaning or roughing.

TT No.	Fill Material	Trim	Rows	Handle	PRICE
758PR366	Hog bristle	3/4"	4 x 9	8-1/4" x 1-1/16"	$11.50
758PR360	Horse hair	3/4"	4 x 9	8-1/4" x 1-1/16"	$11.50
415CH036	.008 Brass	3/4"	4 x 9	8-1/4" x 1-1/16"	$11.83

ESD Heavy-Duty Brush

Heavy-duty scrubber and duster with hog bristles that works well when cleaning sticky, crusty materials or viscous fluids. **Specs:** Hardwood handle; Bristle pattern: 2 x 6; Bristle trim: 1/2"; Face: 7/8"W x 3/8"L; 5-1/2" OAL. **(USA)**

Easy Seller

Hog Hair **No. 758PR121** $4.28
Horse Hair **No. 758CH120** $4.28
Nylon **No. 758CH127** $2.83

Conductive Brush

Nylon/Carbon-fused bristles for cleaning rosin-based fluxes & solder paste residues. Bristles are 10^3 /sq. and conductive. Angled handle is static-dissipative 10^8 /sq. 5-3/4" OAL. **(USA)**
No. 758ST187 .....$6.25

Draftsman's Duster

Medium bristle 8" brush length, 2" trim, 1 row, 14-1/2" OAL.
No. 758CH013 .....$8.70

Bristle Cleaning Brushes

Three 1-3/4" rows, 7/16" nylon filament. **(USA)**
No. 758CH022 6" OAL.....$4.48

TECHSPRAY

Fiber Optic Swab

ENLARGEMENT OF HEAD

Ideal for removing transmission-disrupting contaminants in bulkhead connectors because the head conforms to various connector shapes. Optical conductor surface won't get scratched because swab heads are welded without seams. Use wet or dry. 6" OAL. **(USA)**

1.25mm diameter head
50/pk - (2316-50)
No. 754CH231 .....$24.92
1000/pk - (2316-1000)
No. 754CH2316 .....$430.83
2.5mm diameter head
50/pk - (2317-50)
No. 754CH2317 .....$27.73
1000/pk - (2317-1000)
No. 754CH2311 .....$514.75

Foam TechSwab®

ENLARGEMENT OF HEAD

The reticulated polyurethane 1/4" foam head has 100 pores per inch to insure excellent absorbency while minimizing contamination. Polypropylene handle. Packaged in a Class 100 cleanroom static dissipative resealable bag. **50/pk. (USA)**
No. 754CH2303 (2303-50) $19.19

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.
We reserve the right to correct misprints.

Chemtronics /COVENTRY Swabs

Diamond™ Swabs

Designed for your ultra-critical applications where contamination is the utmost concern; this swab has a wrapped tubular knit head. **(USA)**

TT No.	Swab OAL	Head OAL	Head Size	Handle	Head	Pack	PRICE
237PR1353	2.8"	0.78"	0.16"	GFN	KP	100	$48.37

Static Control Swabs

Engineered to eliminate damage from static electricity, the handles of these swabs will dissipate 99% of a 5,000V charge in 0.01 seconds for conductive and in less than 0.5 seconds for ESD. The handles are solvent and acetone resistant, leaving behind no residue.

TT No.	Swab OAL	Head OAL	Head Size	Handle	Head	Pack	PRICE
237PR121	2.8"	0.40"	0.25"	GFN	KP	25	$14.65
237PR360	5.8"	0.75"	0.19"	ESD	KP	500	$157.83
237PR415	2.8"	0.40"	0.13"	ESD	PU	500	$97.35
237PR070	3.2"	0.39"	0.11"	ESD	PU	500	$97.35

Sealed Polyester Swabs

An exceptionally clean swab featuring either knit or nonwoven fabric heads which are thermoformed and welded to the swab head. Acid and solvent resistant. Sealed edges build in high strength with no loose fibers or particulates. Class M1 processing gives you the lowest ionic, non-volatile residue and particles contaminants. **(USA)**

TT No.	Swab OAL	Head OAL	Head Size	Handle	Head	Pack	PRICE
237PR606	5.8"	0.75"	0.19"	PP	KP	500	$134.05
237PR384	2.7"	0.44"	0.09"	PP	KP	500	$71.62

Wrapped Foam Swabs

These durable wrapped foam swabs are designed for precise applications and delivers superior abrasion resistance for removal of tough contaminants. Wicking action pulls solvent from surfaces and provides good particle entrapment. **(USA)**

TT No.	Swab OAL	Head OAL	Head Size	Handle	Head	Pack	PRICE
237PR205	2.6"	1.06"	0.12"	W	PP	500	$102.28
237PR080	2.6"	0.89"	0.11"	W	PP	500	$102.28
237PR210	2.8"	1.08"	0.14"	N	PP	500	$118.11

General Purpose Cleaning Swabs

These cost-effective swabs are designed for general purpose applications with heads made of 100 ppi reticulated medical grade polyurethane foam or medical grade cotton to provide excellent particle entrapment. The open cell polyurethane foam gives the best solvent holding ability of any style of swab; cotton are free of adhesives or binders that could contaminate your processes.

TT No.	Swab OAL	Head OAL	Head Size	Handle	Head	Pack	PRICE
237PR410	2.8"	0.40"	0.13"	PP	PU	500	$47.88
237PR440	3.2"	0.39"	0.11"	PP	PU	500	$50.91
237AE238	6"	Dual 7/8"	Dual 3/8"	PP	Sealed PU	50	$40.51
237PR502	6"	0.076"	Taper	PP	PPF	50	$37.32
237PR055	3-1/4"	7/8"	1/8"	ABS	CC	50	$41.27

Key For all Swab Handles and Heads:

C *= Medical Grade Cotton;* ***CC*** *= Chamois Cloth;* ***PU*** *= Polyurethane;*
F *= 100 PPI Open Cell Foam;* ***F/C*** *= 100 PPI Open Cell Foam/Over Cotton;*
N/P *= Nylon/Polypropylene;* ***PP*** *= Polypropylene;* ***PPF*** *= Porous Polyvinyldene Fluoride;* ***W*** *= Wood;* ***GFN*** *= Glass Filled Nylon;* ***Poly*** *= Polyester;*
KP *= Knit Polyester;* ***P/C*** *= Polyester Foam;* ***SC*** *= Synthetic Chamois*

TECHNI-TOOL Industrial Tipped Applicators

TT No.	Swab OAL	Head OAL	Head Size	Handle	Head	Pack	PRICE
758CH807	6"	1/12"	1/2"	W	C	100	$2.06
758CH106	6"	1"	3/8"	W	F/C	50	$9.32
758CH228	6"	13/16"	3/8"	W	F/C	50	$8.81
758CH200	6"	Dual 5/8"	Dual 3/16"	W	C	100	$3.04
758CH5000	6"	5/8"	3/16"	W	Hot Melt	100	$2.01
758CH821 (Dual)	6"	5/8" 5/8"	1/32" 3/16"	W	C	100	$2.88
758CH833	3"	5/8"	5/32"	W	C	100	$2.73
758CH010	3"	5/8"	3/16"	W	C	1000	$13.70
758CH016	6"	5/8"	3/16"	W	C	1000	$13.38
758CH1616	6"	7/8"	1/4"	PP	F	50	$14.52
758CH060	5"	1-1/8"	29/32"	PP	F	50	$15.40
758CH2050	5"	15/16"	9/16"	PP	F	50	$16.48
758CH3050	6"	13/16"	3/16"	PP	F	50	$9.89
758CH1807	6"	7/8"	5/8"	PP	F	50	$10.76
758CH410	2.8"	1/2"	5/32"	PP	F	50	$10.81
758CH1676	6"	9/16"	3/16"	PP	F	50	$14.01

TECHNI-STAT Static Dissipative Swabs

New!

ESD-safe swabs help protect from effects of static discharge. Solid polypropylene shaft. Non-sterile.

TT No	OAL	Head OAL	Head Size	Handle	Head	Pack	PRICE
758CH372	2.7"	0.56"	0.16"	SPP	SF	50	$10.20
758CH126	2.7"	0.40"	Tapered	SPP	F	50	$9.19
758CH608	6"	0.81"	0.19"	SPP	SF	50	$10.72
758CH506	6"	0.56"	0.24"	SPP	M	100	$37.73
758CH776	6"	0.66"	0.27"	SPP	M	100	$33.69

SPP - Static dissipative polypropylene *M - Micro fiber*
SF - Static dissipative foam

Anti-Static Tipped Applicators

TT No.	Swab OAL	Head OAL	Head Size	Handle	Head	Pack	PRICE
758CH186	6"	11/16"	3/16"	W	F	50	$14.88

TECHNI-STAT Cleanroom PurSwab® Polyester Tipped Applicators

TT No.	Swab OAL	Head OAL	Head Size	Handle	Head	Pack	PRICE
758CH3600	6"	1-1/4"	1/2"	PP	P	50	$27.96
758CH3605	6"	1-3/4"	1/4"	PP	P	100	$32.91
758CH3610	3"	5/8"	1/4"	PP	P	100	$33.94
758CH3615	6"	1/2"	1/8"	PP	P	100	$21.68
758CH3620	3"	3/8"	1/16"	Acetal	P	100	$21.89
758CH8540	3"	1/2"	1/8"	Acetal	P	100	$77.76

PurSwab Popule® Self-Saturating Swab

Swab combines solvent and applicator in one convenient unit. Simply squeeze handle to break the patented seal and allow liquid to flow to foam head. Comes filled with 91% isopropyl alcohol and 9% deionized water. Tip 9/16" dia. x 1-1/16"L. 4-1/2" OAL. 50/Pk.
No. 758CH4545 ..... $19.72

Chemical Resistant Tipped Applicator

TT No.	Swab OAL	Head OAL	Head Size	Handle	Head	Pack	PRICE
758CH170	6"	15/16"	3/16"	W	F/C	50	$10.92

5-Minute guide to choosing FINE ELECTRONICS PLIERS & CUTTERS

With so many pliers and cutters available for fine electronics work, it's hard to know exactly which one is right for you. The good news is that we carry the full range of cutters and pliers all manufactured to the highest quality standards.

5 QUESTIONS TO ANSWER WHEN SELECTING YOUR TOOLS:

1. MANUFACTURING PROCESS. The most common production methods are stamping, extruding and forging. Stamping cuts the metal into the tool shape, creating lower-cost tools with limited life and strength. Extruded tools are stretched into the tool shape which provides more strength than stamping. The best option is forging, in which molten metal is poured into a mold. Because the grain structure of the metal follows the profile of the tool, forged tools last the longest. The cost of the process, however, makes them more expensive.

2. ERGONOMICS. Ergonomics are crucial when it comes to handles. Soft cushioned handles improve both your comfort and grip. Longer handles let you use all your fingers. Concave handles allows pressure to be distributed over your entire palm area. Anti-static grip material can dissipate charges for ESD applications. In general, additional features are worth the cost in comfort and efficiency.

3. CUTTING EDGES. Choose your cutting edges with care - it's a double-edge sword, so to speak. Cutters with the flushest edges (called full flush) give you the most precise cut, but may wear faster than other edge types. Semi-flush edges usually offer the longest life due to increased durability. Flush cutters fall somewhere in-between.

Semi-Flush (SF). Standard cut, for universal use on hard and soft steel wire and soft materials like copper wire or cable. Creates "pinched" leads. Wide cutting range and uses.

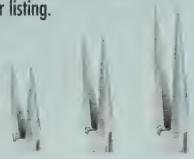
Flush (F). Almost full flush cutting. Fine cutting edges. Cuts cable and soft steel and copper wire. Also creates "pinched" leads, but the pinch is at a lower altitude than semi-flush edges. For creating leads to slightly tighter specifications.

Full Flush (FF). Perfectly full flush cutting. Razor sharp cutting edges. For cable and soft steel and copper wire. Ideal for applications where lead-end configuration and mechanical shock transmission are issues.

4. HEAD SIZE. Head size depends on your application - Need a small head for working in small quarters? Larger head for more cutting or bending power? Look for our head size symbols on every fine electronics plier and cutter listing.

APPROXIMATE SIZE CLASSIFICATIONS:

PLIERS (length of head)
Small: .88" to 1.3"
Medium: 1.31" to 1.5"
Large: 1.51" +



CUTTERS (width of head)
Small: .31" to .39"
Medium: .40" to .50"
Large: .51" +

5. HEAD SHAPE. Once again, your application determines the best shape. If you need access to restricted space, a good first start is an oval head cutter. If an oval head is too large at the tip, try a tapered head cutter - the diagonal sides increase the area you can reach.

If you still need something smaller, tapered and relieved head cutters are tapered on both sides and have the underside cut away. They're the smallest style available. You'll gain increased access but have a slightly reduced cutting range.

Other more specialized heads include angle and tip cutters. Angle cutters, also called oblique, feature a head set at an angle to the cutter body. Tip cutters have extreme tapering on all sides, allowing access and reach. Both cutter types require special care, however, and should be restricted to specific applications.

TEC-CUT Infinity Elite Cutters & Pliers

Swiss-made Infinity Elite pliers and cutters are the best you'll ever use. They feature stainless steel dual-leaf springs and matched bearing rings to minimize metal-to-metal contact and friction. The high-quality ball-bearing steel is precisely heat-treated to provide the highest resiliency and toughness, and all tools in the series come backed with a lifetime warranty on materials and workmanship. Unique two-component handles combine a hard plastic core with a soft gripping surface for comfortable finger support for hours of use without fatigue. Static dissipative (10^6 -10^9 Ω/sq.), oil, grease and wear-resistant.

Cutters

Oval Head

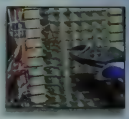
TT No.	Head Size	Cut	Cutting Capacity	OAL	PRICE
A 758PL5140	S	Semi-Flush	0.2 - 1.2 mm	4.8"	$47.87
758PL5141	S	Flush	0.1 - 1.2 mm	4.8"	$48.88
758PL5142	S	Full-Flush	0.1 - 1.0 mm	4.8"	$49.90
B 758PL5150	L	Semi-Flush	0.3 - 1.6 mm	4.9"	$49.90
758PL5151	L	Flush	0.2 - 1.6 mm	4.9"	$50.92
758PL5152	L	Full-Flush	0.2 - 1.2 mm	4.9"	$51.94

Tapered Head

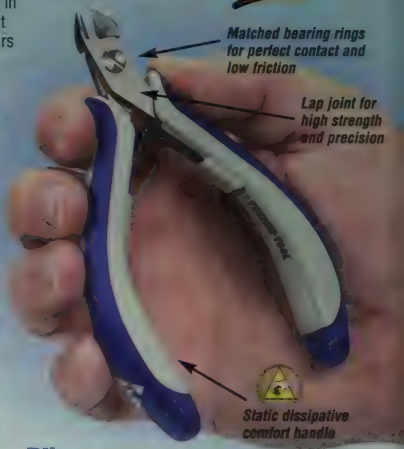
TT No.	Head Size	Cut	Cutting Capacity	OAL	PRICE
C 758PL5340	S	Semi-Flush	0.2 - 1.2 mm	4.8"	$47.87
758PL5341	S	Flush	0.1 - 1.2 mm	4.8"	$48.88
758PL5342	S	Full-Flush	0.1 - 1.0 mm	4.8"	$49.90
D 758PL5350	L	Semi-Flush	0.3 - 1.6 mm	4.9"	$49.90
758PL5351	L	Flush	0.2 - 1.6 mm	4.9"	$50.92
758PL5352	L	Full-Flush	0.2 - 1.2 mm	4.9"	$51.94

Tapered & Relieved Head

TT No.	Head Size	Cut	Cutting Capacity	OAL	PRICE
E 758PL5540	S	Semi-Flush	0.2 - 1.0 mm	4.8"	$51.94
758PL5541	S	Flush	0.1 - 1.0 mm	4.8"	$52.96
758PL5542	S	Full-Flush	0.1 - 0.8 mm	4.8"	$53.98



TEC-CUT New!



Pliers

Snipe Nose

TT No.	Head Size	Jaw	OAL	PRICE
F 758PL6021	S	Smooth	5.2"	$41.15

Long Snipe Nose

TT No.	Head Size	Jaw	OAL	PRICE
G 758PL6023	S	Smooth	5.6"	$42.15

Flat Nose

TT No.	Head Size	Jaw	OAL	PRICE
H 758PL6011	S	Smooth	5.2"	$39.75

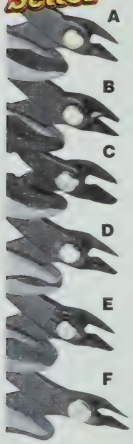
Round Nose

TT No.	Head Size	Jaw	OAL	PRICE
I 758PL6041	S	Smooth	5.2"	$44.75

TEC-CUT Affordable ESD Microshears

Include lightweight versions (A and B) that are easier to handle and make thousands of cuts on soft copper wire. Thicker body (D and E) nippers deliver more strength without extra weight. Short nose nippers (G and H) include specially hardened jaws to cut hardened copper and iron wire. Stamped.

Fast Seller



Nippers

Lightweight

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	SALE PRICE
A 758TW0028	M	Flush	Up to .039"	5-1/8"	$17.55

Lightweight with Wire Catch

B 758TW0038	M	Flush	Up to .039"	5-1/8"	$15.99

Heavy Duty Diagonal

C 758TW0066	L	Flush	Up to .120"	6"	$24.30

Thicker Body

D 758TW0044	M	Flush	Up to .040" Soft Copper	5-1/8"	$21.35

Thicker Body with Wire Catch

E 758TW0052	M	Flush	Up to .040" Soft Copper	5-1/8"	$17.00

Fine SMT Micro Cutters

F 758TW0001	S	Flush	Up to .040" Soft Copper	4-3/4"	$18.30

Short Nose

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
G 758TW0062	S	Semi-Flush	Up to .059"	5-1/2"	$19.75

Short Nose with Wire Catch

H 758TW0064	S	Semi-Flush	Up to .059"	5-1/2"	$17.85

Economy ESD Nipper Kit – 5 pc

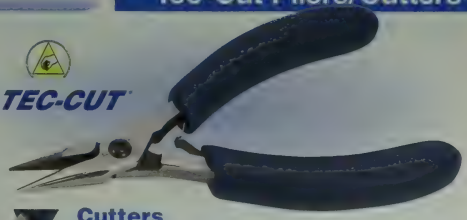
New!

Includes: One each: 758TW0028, 758TW0066, 758TW0044, 758TW0001, 758TW0062 in a 6 pouch, folding tool wallet.

No. 758TW0067 .....$89.25

TEC-CUT Long Life ESD Pliers & Cutters

Forged from high chromium, high carbon steel to deliver years of maximum performance. Precision honed cutting edges are doubled inducted, heat treated, and hardened to Rc58. Spot welded leaf springs for extra durability. From a leading tool manufacturer but without the premium price.



Pliers

Snipe Nose

TT No.	Head Size	Jaw	OAL	PRICE
A 758PL102	S	Smooth	5.28"	$24.78
758PL112	S	Smooth	4.61"	$23.13
758PL113	S	Serrated	4.61"	$23.13
758PL116	L	Serrated	6.01"	$24.78

Long Nose

758PL109	S	Smooth	5.36"	$23.13
B 758PL110	S	Serrated	5.36"	$23.13

Flat Nose

C 758PL106	S	Smooth	5.28"	$23.13

Cutters

Oval Diagonal

TT No.	Head Size	Cut	Cutting Cap. AWG	OAL	PRICE
D 758PL103	M	Flush	Up to 16 AWG	4.80"	$25.67
758PL105	M	Semi-Flush	Up to 16 AWG	4.80"	$25.67
758PL111	L	Semi-Flush	Up to 14 AWG	4.93"	$27.28

Cutters

Tapered Diagonal

TT No.	Head Size	Cut	Cutting Cap. AWG	OAL	PRICE
E 758PL104	M	Full Flush	Up to 18 AWG	4.80"	$25.67
758PL108	M	Flush	Up to 16 AWG	4.80"	$25.67
758PL114	M	Flush	Up to 18 AWG	4.25"	$25.67

Tapered Relieved Diagonal

F 758PL101	M	Flush	Up to 22 AWG	4.25"	$25.67

Tapered Relieved Carbide Diagonal

G 758PL100	L	Semi-Flush	22 AWG	6.33"	$105.88

Long Nose Tip

H 758PL107	L	Full Flush	Up to 22 AWG	5.14"	$25.67

Angled Head

I 758PL115	L	Flush	Up to 20 AWG	4.91"	$33.93

TEC-CUT High Quality Italian Chrome Vanadium Pliers and Cutters

Made of Italian chrome vanadium, cold-sheared and precision machined for superior strength and quality. With dual leaf springs. ESD safe. (Italy)

Cutters

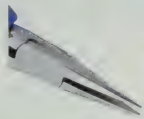
Transverse End

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
758PL058	M	Semi-Flush	Up to 24 AWG .020" Soft Copper	4-5/8"	$27.30
758PL060	M	Flush	Up to 26 AWG .016" Soft Copper	4-5/8"	$29.15

Angle Blade - 10-Degree Angle

758PL054	S	Flush	.025" Soft Copper	4"	$36.15

Pliers



Subminiature Long Nose

TT No.	Head Size	Jaw	OAL	PRICE
758PL056	S	Smooth	4-1/8"	$20.20
758PL062	S	Serrated	4-1/8"	$20.45

TEC-CUT Specialty Sets

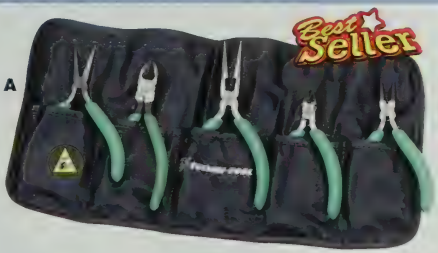
TEC-CUT

A. Pliers Kit - 5 pc

Includes: One each: 272PL018, 272PL120, 272PL116, 272PL154, 294PL200 and roll-up pouch.
No. 758PL016.....$82.15

B. Fine Electronics Kit - 5 pc

Includes: One each: 294PL116, 272PL041, 294PL110, 844PL072, 758PL060, and roll-up pouch.
No. 758PL010 .....$129.15



C. Pliers & Cutter Kit - 5 pc

Includes: standard diagonal cutter, long chain nose plier, wire stripper, tapered diagonal cutter, flat nose pliers, all in a roll-up pouch.
No. 758PL012.....$65.68

TEC-CUT Mini Electronic Pliers & Cutters

Hot-drop forged, hand-induction heat-treated and hand sharpened. Feature a satin finish and spring leaf for dependable opening. Tested to ASME B107.25M and U.S. government specs. Body hardness 41-43 HR^c. Cutting edge Rockwell hardness 57-63 HR^c. ESD safe. **(USA)**

Pliers

Needle Nose

TT No.	Head Size	Jaw	OAL	PRICE
A 758PL4018	M	Smooth	5-3/4"	$13.45

Duck Bill

TT No.	Head Size	Jaw	OAL	PRICE
B 758PL4022	M	Smooth	5"	$13.45

Chain Nose

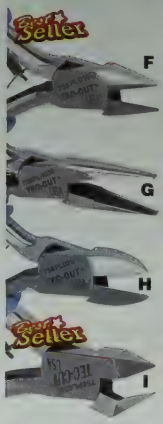
TT No.	Head Size	Jaw	OAL	PRICE
C 758PL4026	M	Smooth	4-3/4"	$14.25
758PL024	M	Serrated	4-3/4"	$14.25
758PL4028	M	With Cutter	4-3/4"	$14.80

Long Nose

TT No.	Head Size	Jaw	OAL	PRICE
D 758PL020	S	Subminiature Smooth	4-1/2"	$13.45

Round Nose Looping

TT No.	Head Size	Jaw	OAL	PRICE
E 758PL040	S	Smooth Round	4-1/2"	$19.35



Cutters

Diagonal Straight

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
F 758PL018	S	Flush	Up to 24 AWG (.020") Soft Copper	4-3/8"	$14.80

Transverse End

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
G 758PL4036	M	Flush	Up to 30 AWG (.010") Soft Copper	4-3/4"	$14.25

Oval Head Diagonal

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
H 758PL022	S	Semi-Flush	Up to 22 AWG (.032") Soft Copper	4-1/4"	$14.25

Angled

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
I 758PL4040	S	Flush	Up to 22 AWG (.032") Soft Copper	4"	$15.90

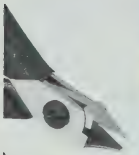
TEC-CUT

Fine Electronics Miniature Pliers Kit - 4 pc
Includes: One each: 758PL018, 758PL4014, 758PL4018, 758PL4032, and black zipper case.
No. 758PL700 ..... **$69.35**

Mini-Electronics Kit 6 - pc
Includes: One each: 758PL018, 758PL022, 758PL4018, 758PL4022, 758PL4028, 758PL4036.
No. 758PL028 ..... **$89.55**

TEC-CUT Super-Micro Series Pliers and Cutters

Specially designed for super-micro work, made of the finest precision-ground forged steel. (Japan)



Cutter

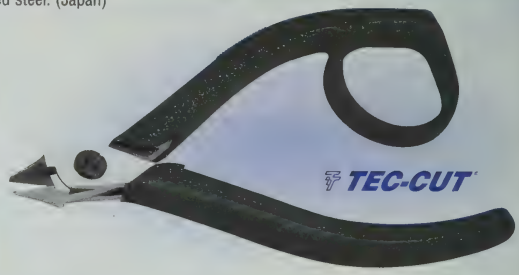
Super Micro Diagonal

TT No.	Head Size	Jaw	OAL	PRICE
758PL003	S	For Max 1.0mm Dia. Copper Wire	100mm	$70.45

Pliers

Super Micro Long Flat Nose

TT No.	Head Size	Jaw	OAL	PRICE
758PL019	S	For Max 0.08mm Fine Wire	125mm	$64.85



TEC-CUT Flush Cutters

TEC-CUT

Compare to the Plato 170 Lead Cutters

Standard Flush Cutter

TT No.	Head Size	Cut	Cutting Cap. AWG	OAL	PRICE
758PL172	S	Flush	20 AWG (0.8mm)	5"	$5.20
272PL170	Same as above with ESD grips				$6.59

Best Seller

XURON CORP. Micro-Shear® Flush Cutters

Tough alloyed steel, state-of-the-art heat treating and ultra-precise CNC grinding combine to give you the ultimate shear. Light Touch™ return spring. Stamped. **(USA)**

THE KEY TO CHOOSING THE RIGHT XURON CUTTER:

All groups shown have multiple listings and you may wonder, why? By using the Model number and this key the answers are clear!

STANDARD MODEL NUMBER FOLLOWED BY:
(F) Lead Retainer **(AS)** Static Control Grips **(ASF)** Both

***Example: 9110F** is an Oval Head Cutter w/lead retainer

9100 Oval Head

TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
892PL1000	9100	Up to 14 AWG (1.6 mm)	4.9"	$23.50
892PL1001	9100F		4.9"	$24.50
892PL1002	9100AS		4.9"	$24.50
892PL1003	9100ASF		4.9"	$25.50

9200 Tapered Head

TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
892PL1005	9200	Up to 14 AWG (1.6 mm)	4.9"	$23.50
892PL1006	9200F		4.9"	$24.50
892PL1007	9200AS		4.9"	$24.50
892PL1008	9200ASF		4.9"	$25.50

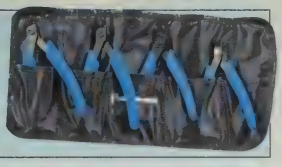
9200 Tapered Head with Long Handle (LH)

TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
892PL1015	9200LH	Up to 14 AWG (1.6 mm)	5.75"	$24.75
892PL1016	9200LHF		5.75"	$25.75
892PL1017	9200LHAS		5.75"	$25.75
892PL1018	9200LHASF		5.75"	$26.75

9250 Extra-Tapered (ET) Head

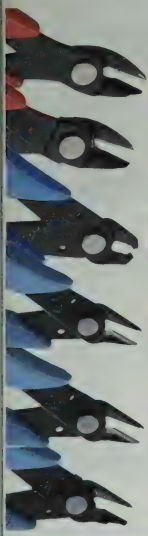
TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
892PL1009	9250ET	Up to 14 AWG (1.6 mm)	4.9"	$27.80
892PL1010	9250ETAS		4.9"	$28.80

Micro-Shear® Kit – 4 pc
Includes: One each: 892PL9100, 892PL1005, 892PL1009, 892PL1006 and pouch.
No. 758PL008 .....$73.25



XURON CORP. Cutters

Featuring ergonomically shaped, non-slip elastomer grips, a non-glare black finish, and an ultra-slim profile for access in high-density areas. Stamped. Refer to the chart on previous page "The Key to choosing the right Xuron cutter" for more info.



Cutters

2175 Maxi-Shear™ *Best Seller*
Flush Cutter with medium head.

TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
892PL1019	2175	Up to 16 AWG (1.3 mm)	6"	$16.95
892PL1020	2175F		6"	$18.95
892PL1021	2175AS		6"	$17.95
892PL1022	2175ASF		6"	$19.95

Cut & Crimp Tool

TT No.	Model	Head Size	Cut	Cut/Crimp Cap. AWG	OAL	PRICE
892PL1038	670	S	Square-Ended	Soft wire up to 20 AWG (0.8mm)	4-3/4"	$22.25
892PL670	670HD	S	Square-Ended	Soft wire up to 14 AWG (1.6mm)	4-3/4"	$26.75

170 Micro-Shear®
Flush Cutter with small head. **Full Flush Cutter*

TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
892PL1025	170-II	Up to 20 AWG (0.8 mm)	5"	$8.55
892PL1026*	170-IIA		5"	$9.65
892PL1027	170-IIF		5"	$9.65
892PL1028	170-IIAS		5"	$9.65
892PL1029	170-IIASF		5"	$10.75

Specialty Pliers

Tweezer Nose™ Plier

TT No.	Model	Head Size	Jaw	OAL	PRICE
892PL1030	450	S	Smooth	5"	$16.20
892PL1031	450S	S	Serrated	5"	$16.20

Kevlar® Fiber Cutters

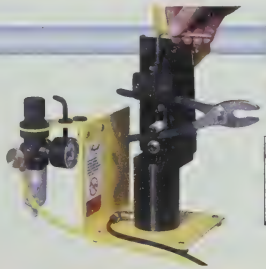
TT No.	Model	Head Size	Cut	OAL	PRICE
892PL1004	9180	M	Serrated	5.75"	$23.75

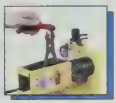
Pneumatic Cutters

Pneumatic Hand Tool Operator

This Pneumatic Operator allows you to: set the maximum tool opening; control the tool closing force with the built-in pressure regulator; change the tool closing speed with a separate adjustment knob; set how much the tool closes and select what direction the tool faces. **Specs:** 120psi (8 bar) maximum input, 80-100 psi (5.5-6.8 bar) is adequate; actuator stroke from 0 to 2.05"; fits tool handles from 5" to 12" long and quick push-lock type hose receptacles and couplers. **Includes:** Pneumatic Crimp Operator Tool System; Precision Speed Control Kit and Guard Kit. ***One-Year Warranty.*** **(USA)**
No. 436PL511 .....$578.00

Extra Tool Holder Module – Includes upper tool holder module with adjustable stop feature. **(USA)**
No. 436PL515 *(Not Shown)* $198.00

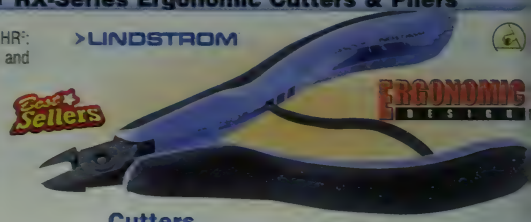




>LINDSTROM RX-Series Ergonomic Cutters & Pliers

Lindstrom® ergonomic cutters and pliers feature: Precision induction hardening 63-65 HRc; Precisely forged; Rounded shape for easy rotation; ESD-safe handles; Adjustable and replaceable Biospring™; CNC machining; Precision screw joint; Lead-catchers.

>LINDSTROM



Cutters

Oval Head

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL430	S	Semi-Flush	32-18 GA.	5.25"	$58.50
844PL131	S	Flush	38-18 GA.	5.25"	$59.50
844PL813	S	Full Flush	38-20 GA.	5.25"	$66.50
844PL140	S	Semi-Flush	32-16 GA.	5.33"	$55.50
844PL141	S	Flush	38-16 GA.	5.33"	$56.50
844PL042	S	Full Flush	38-18 GA.	5.33"	$63.50
844PL150	M	Semi-Flush	28-14 GA.	5.43"	$57.50
844PL815	M	Flush	32-14 GA.	5.43"	$59.50
844PL153	M	Full Flush	32-16 GA.	5.43"	$69.50

Heavy Duty Oval Head

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL8180	L	Semi-Flush	24-9 GA.	8.25"	$51.50

Tapered Head

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL431	S	Semi-Flush	32-18 GA.	4.33"	$57.50
844PL440	S	Flush	38-18 GA.	4.33"	$59.50
844PL458	S	Full Flush	38-18 GA.	4.33"	$61.50

Tapered & Relieved Head

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL461	S	Semi-Flush	32-18 GA.	5.33"	$63.50
844PL522	S	Flush	38-18 GA.	5.33"	$64.50
844PL148	S	Full Flush	38-20 GA.	5.33"	$66.50

Oblique Head

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL246	S	45° Flush	32-18 GA.	5.63"	$103.50
844PL248	S	45° Flush	32-22 GA.	5.63"	$109.50

Replacement Spring

844AC800 ..... $2.50

Cutters

Tip Cutters

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL8234	S	Full Flush	38-26 GA.	4.5"	$112.50
844PL149	S	Flush	38-22 GA.	5.47"	$119.50
844PL8237	M	Full Flush	38-22 GA.	5.6"	$109.95
844PL8233	L	Full Flush	38-22 GA.	5.9"	$103.50

Oval Head

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL8160	L	Semi-Flush	26-12 GA.	5.80"	$61.50

Pliers

Chain Nose

TT No.	Head Size	Jaw	OAL	PRICE
844PL890	M	Smooth	6.24"	$53.50
844PL891	M	Serrated	6.24"	$54.50

Round Nose

TT No.	Head Size	Jaw	OAL	PRICE
844PL759	S	Smooth	4.72"	$53.50

60° Bent Tip Snipe Nose

TT No.	Head Size	Jaw	OAL	PRICE
844PL892	M	Smooth	6.12"	$57.50

Short Snipe Nose

TT No.	Head Size	Jaw	OAL	PRICE
844PL893	S	Smooth	5.77"	$53.50

Flat Nose

TT No.	Head Size	Jaw	OAL	PRICE
844PL491	S	Smooth	5.77"	$49.50

>LINDSTROM Supreme Series Cutters & Pliers

The Lindstrom® Supreme Series is designed for general electronics work and fine mechanical repair. Made from forged steel most have a specially made box joint with precision alignment jaws.

Cutters

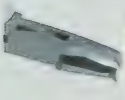
Tapered Head

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL190	S	Semi-Flush	36-16 GA.	4.29"	$47.50

Angle End - 11°

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL290	S	Semi-Flush	32-18 GA.	4.25"	$55.50
844PL108	S	Flush	32-18 GA.	4.25"	$56.50
844PL293	S	Flush	32-18 GA.	4.25"	$55.50

Reverse Angle



TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL280	S	Flush	32-20 GA.	4.64"	$82.50

Pliers

Short Chain Nose

TT No.	Head Size	Jaw	OAL	PRICE
844PL070	S	Smooth	4.72"	$44.50

Snipe Nose

TT No.	Head Size	Jaw	OAL	PRICE
844PL116	M	Smooth	5.20"	$43.50
844PL781	M	Serrated	5.20"	$43.50

Round Nose

TT No.	Head Size	Jaw	OAL	PRICE
844PL114	S	Smooth	4.72"	$43.50

>LINDSTROM 80-Series

These precision-forged and crafted cutters feature: Precision induction hardening 63-65 HR°; 1% carbon/chrome ball bearing steel; Replaceable springs; CNC machining; Precision screw joint.

Cutters

Tapered Head

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL143	S	Semi-Flush	32-16 GA.	4.33"	$48.50
844PL030	S	Flush	38-16 GA.	4.33"	$49.50
844PL145	S	Full Flush	38-18 GA.	4.33"	$54.50
844PL8153	M	Semi-Flush	28-14 GA.	4.43"	$51.50
844PL154	M	Flush	32-14 GA.	4.43"	$54.50
844PL155	M	Full Flush	32-16 GA.	4.43"	$63.50
844PL163	L	Semi-Flush	26-12 GA.	4.92"	$55.50
844PL164	L	Flush	32-12 GA.	4.92"	$66.50
844PL165	L	Full Flush	32-14 GA.	4.92"	$79.50

Oval Head

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL130	S	Semi-Flush	32-18 GA.	4.25"	$49.50
844PL8131	S	Flush	38-18 GA.	4.25"	$50.50
844PL321	S	Full Flush	38-20 GA.	4.25"	$55.50
844PL072	S	Semi-Flush	32-16 GA.	4.33"	$47.50
844PL078	S	Flush	38-16 GA.	4.33"	$48.50
844PL142	S	Full Flush	38-18 GA.	4.33"	$54.50
844PL086	M	Semi-Flush	28-14 GA.	4.43"	$49.50
844PL151	M	Flush	32-14 GA.	4.43"	$51.50
844PL152	M	Full Flush	32-16 GA.	4.43"	$58.50
844PL090	L	Semi-Flush	26-12 GA.	4.92"	$51.50
844PL161	L	Flush	30-12 GA.	4.92"	$58.50
844PL162	L	Full Flush	30-14 GA.	4.92"	$67.50

Best Sellers

Tapered & Relieved Head

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL146	S	Semi-Flush	32-18 GA.	4.33"	$50.50
844PL147	S	Flush	38-16 GA.	4.33"	$51.50
844PL418	S	Full Flush	32-16 GA.	4.33"	$58.50
844PL156	M	Semi-Flush	28-14 GA.	4.43"	$53.50
844PL157	M	Flush	32-14 GA.	4.43"	$59.50
844PL158	M	Full Flush	32-16 GA.	4.43"	$69.50

Oblique Head

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL247	S	45° Flush	32-18 GA.	4.63"	$87.50
844PL249	S	45° Flush	32-22 GA.	4.63"	$93.50

Angle Head

TT No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
844PL211	S	20° Flush	34-16 GA.	4.33"	$89.50

Swanstrom Super Cutters & Pliers

Traditional style handle with Static Dissipative Soft Touch™ foam. High chrome and carbon alloy steel bearings and edges. Wider bodies for better bearing properties and strength. Stainless Scrivets™ for lubricity, adjustability and cleanliness. **(USA)**

Cutters

Oval Head Diagonal

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
A 738PL611	L	Flush	12 AWG	6.33"	$48.81
B 738PL411	M	Flush	16 AWG	5.65"	$47.07
C 738PL0510	L	Semi Flush	14 AWG	5.78"	$47.07
D 738PL612	L	Full Flush	14 AWG	6.33"	$48.81
E 738PL432	S	Full Flush	20 AWG	5.53"	$47.07
F 738PL112	L	Full Flush	18 AWG	5.65"	$52.30
738PL412	M	Full Flush	18 AWG	5.65"	$47.07
738PL512	M	Full Flush	16 AWG	5.78"	$47.07
738PL610	L	Semi Flush	12 AWG	6.33"	$48.81

Oval Slim Head Diagonal

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
738PL414	M	Full Flush	18 AWG	5.65"	$47.07

Tapered Diagonal

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
G 738PL416	M	Full Flush	16 AWG	5.65"	$47.07
738PL516	L	Full Flush	16 AWG	5.78"	$47.07

Tapered High Leverage Mini Diagonal

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
H 738PL438	S	Full Flush	18 AWG	5.51	$47.07

Tapered Slim Diagonal

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
I 738PL421	M	Full Flush	18 AWG	5.65"	$47.07
738PL420	M	Flush	18 AWG	5.65"	$47.07
738PL520	L	Flush	16 AWG	5.78"	$47.07
J 738PL521	L	Full Flush	16 AWG	5.78"	$47.07
K 738PL621	L	Full Flush	14 AWG	6.33"	$55.79

Transverse End Cutter

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
738PL233	S	Full Flush	20 AWG	5.88"	$52.30

Angle End Cutters

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
L 738PL225	L	Full Flush	22 AWG	5.84"	$57.54
M 738PL0491	M	Flush	20 AWG	5.76"	$52.30

Pliers

Snipe Nose

TT No.	Head Size	Jaw	OAL	PRICE
738PL108	S	Smooth	6.00"	$26.15

Curved Needle Nose

TT No.	Head Size	Jaw	OAL	PRICE
738PL240	S	Smooth	5.93"	$34.87

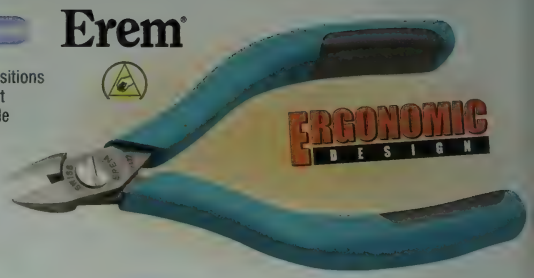
Round Nose

TT No.	Head Size	Jaw	OAL	PRICE
738PL236	M	Smooth	6.13"	$38.36

Straightening

TT No.	Head Size	Jaw	OAL	PRICE
738PL808	S	Smooth	6.06"	$76.71

Erem MagicSense Cutters & Pliers



The ultimate in comfort and performance!
New grip material soft to the touch with a non-slip, solid feel. Handle shape self-positions for the fingers and thumb for comfort. Blades finished smooth, sharp and in perfect alignment. Inter-lock screw joint ensures wobble-free operation and eliminates blade overlapping. Internal magic spring is unbreakable and guaranteed for life.

Cutters

Small Oval Head

TT No.	Model	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
A 272PL2477	2477E	S	Full Flush	20-18 AWG	5"	$63.89

Oval Head – *For Soft Copper Wire*

TT No.	Model	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
B 272PL2422	2422E	S	Flush	32 -16 AWG	5"	$56.43
C 272PL2412	2412E	S	Semi-Flush	32 -16 AWG	5"	$56.43
D 272PL2432	2432E	S	Full-Flush	38 -16 AWG	5"	$56.43

Straight Head Tip

TT No.	Model	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
E 272PL2470	2470E	S	Flush	Up To 24 AWG	5.5"	$69.22

Angle Tip

TT No.	Model	Head Size	Angle	Cut	Cutting Cap. (AWG)	OAL	PRICE
F 272PL2482	2482E	M	45°	Flush	Up to 19 AWG	5.3"	$66.02
272PL2404	2404E	L	30°	Flush	Up to 17 AWG	5.12"	$76.67

Miniature Angle Tip

TT No.	Model	Head Size	Angle	Cut	Cutting Cap. (AWG)	OAL	PRICE
G 272PL2475	2475E	S	45°	Flush	Up to 22 AWG	5.3"	$69.22

Tungsten Carbide Tapered Head

TT No.	Model	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
H 272PL2476	2476 TX1	S	Flush	<0.3mm Piano Wire	5.5"	$175.71

Pliers

Needle Nose

TT No.	Model	Head	Jaw	OAL	PRICE
I 272PL2411	2411P	Fine Point	Smooth	5"	$53.25
J 272PL241	2411PD	Fine Point	Serrated	5"	$54.30

Flat Nose

TT No.	Model	Head	Jaw	OAL	PRICE
K 272PL2442	2442P	Flat Nose	Smooth	5"	$54.30

Round Nose New!

TT No.	Model	Head	Jaw	OAL	PRICE
L 272PL2443	2443P	Round Nose	Smooth	5-3/4"	$61.76

MagicSense Cutters & Pliers Kit – 6 pc New!
Six of the most popular cutters and pliers in a convenient 6-pouch folding tool wallet. **Includes:** (A)272PL2422, (D)272PL2470, (E)272PL2482, (H)272PL2411, (I)272PL24 and (J)272PL2442.
No. 758PL2400 .....$310.95

Erem Specialty Cutters & Pliers

Made of extruded, 100% machined tool steel for durability. With ESD-safe cushion grips for comfort and protection. Patented internal spring maintains constant "fatigue-free" operation for over 1 million openings. Interlock screw joint system eliminates blade overlapping, preventing mechanical shock and damage to sensitive components. (Switzerland)

Cutters

Micro Diagonal

TT No.	Model	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
791PL776	776E	S	Full Flush	Max Cutting Dia. .039" Up to 22 AWG	4-1/4"	$66.02

Diagonal

TT No.	Model	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
791PL607	670EP	S	Full Flush	Cuts Leads to 25mm to 30 AWG	4-1/4"	$103.30

Reversed Angled Tip

TT No.	Model	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
791PL593	593AE	L	Flush	For Standard DIP Leads and SMT Packages to 25mil Pitch. to 26 AWG	4-3/4"	$94.77

Cutters

Compound

TT No.	Model	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
791PL147	147A	M	Semi-Flush	Up To 22 AWG	4-3/4"	$185.30

Oblique PCB - Anti-Shock Shear

TT No.	Model	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
791PL549	549E	L	Semi-Flush	Max Cutting Dia. .047" To 16 AWG	4-1/2"	$108.62

Pliers

Bending

TT No.	Model	Head Size	Jaw	OAL	PRICE
791PL531	531	M	Nylon	5"	$85.18

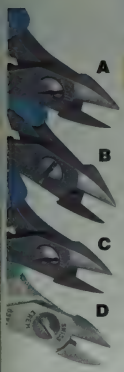
Erem "N" Series Miniatures

With built-in invisible, internal springs that are so precise they maintain constant "fatigue-free" operation. Standard ESD-safe cushion grips. Can be re-sharpened for a minimum 'cost per cut' savings of 36% compared to lower quality cutters. Made of extruded, 100% machined tool steel for durability. (Switzerland)

All Erem Cutters are 100% HAND-TUNED to exact tolerances.

Best Sellers

Cutters



Diagonal Oval Head

	TT No.	Model	Head Size	Cut	Cutting Dia./ Cap. (AWG)	OAL	PRICE
A	272PL512	512N	M	Semi Flush	.063" Max, Up to 16 AWG	4-1/2"	$47.92
B	272PL612	612N	S	Semi-Flush	.05" Max, Up to 16 AWG	4-1/4"	$47.92
C	272PL522	522N	M	Flush	.063" Max, Up to 14 AWG	4-1/2"	$47.92
	272PL623	622N	S	Flush	.05" Max, Up to 16 AWG	4-1/4"	$47.92
D	272PL532	532N	M	Full Flush	.063" Max, Up to 14 AWG	4-1/2"	$47.92
	D 272PL632	632N	S	Full Flush	.050" Max, Up to 16 AWG	4-1/4"	$48.98
	272PL226	E622N	S	Full Flush	.050" Max, Up to 16 AWG	5-3/4"	$54.29

Tapered

	TT No.	Model	Head Size	Cut	Cutting Dia./ Cap. (AWG)	OAL	PRICE
E	E 272PL622	622NA	S	Flush	.050" Max, Up to 16 AWG	4-1/4"	$47.92

Tapered Relieved Head

	TT No.	Model	Head Size	Cut	Cutting Dia./ Cap. (AWG)	OAL	PRICE
F	F 272PL624	622NB	S	Flush	.050" Max, Up to 16 AWG	4-1/4"	$47.92

"N" Series 800 Cutters

Diagonal Oval Head

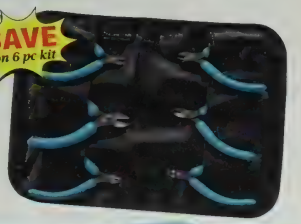
	TT No.	Model	Head Size	Cut	Cutting Dia./ Cap. (AWG)	OAL	PRICE
G	G 272PL822	822N	L	Flush	.064" Max, Up to 14 AWG	4-3/4"	$60.69
H	H 272PL812	812N	L	Semi-Flush	.064" Max, Up to 14 AWG	4-3/4"	$60.69

"N" Series Miniatures Kit – 6 pc

New!

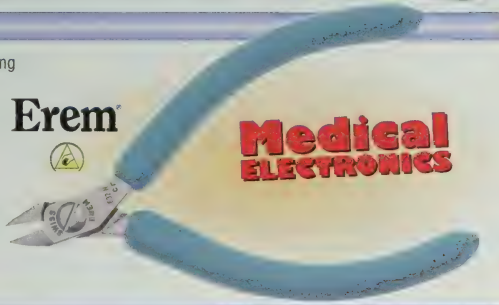
SAVE on 6 pc kit

Six of the most popular cutters a convenient 6-pouch folding tool wallet. **Includes:** 272PL612; 272PL623; 272PL632; 272PL622; 272PL624; and 272PL822.
No. 758PL600.....**$265.85**



Erem Medical Tubing Cutter

Swiss made tools of extruded, 100% machined tool steel for durability. Fatigue-reducing features like internal springs and maximum opening stop. ESD safe cushion grips; smooth, wobble-free operation; interlock screw joint system. (Switzerland)



Precision Cutter

TT No.	Model	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
272PL0632	632NCF	S	Full Flush	Soft materials only; silicone tubings, soft synthetic parts	4-1/3"	$69.22

Erem Carbide Tip Cutters for Medical Applications

Fatigue-free operation for over 1 million openings!

Blades are precision fitted with carbide inserts to cut MP35N stainless wire .10mm to .50mm in diameter found in the manufacture of stents, catheters and guide wires. Made of extruded, 100% machined tool steel for durability. ESD safe cushion grips for unmatched comfort and protection. (Switzerland)

Best Seller

Tapered Relieved Head

TT No.	Model	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
791PL577	576TX	S	Full Flush	.004" ID MP35N Stainless Wire, up to 22 AWG Soft	4-1/4"	$181.04

30-Degree Oblique Head

TT No.	Model	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
272PR503	E503ETST	L	Full Flush	.004" TO .020" MP 35N Stainless Wire, up to 20 AWG soft	4-1/4"	$244.93

Xcelite Bending Pliers & Cutters

Lightweight, miniature pliers line, investment cast from high quality alloy steel for maximum strength and durability. Cutters are forged from high quality alloy steel for maximum strength and durability . Polished heads and ESD-safe, green cushion grips. Forged cutters' edges are machine ground and electronically hardened for extended life in cutting either hard or soft wires. Steel joint maintains perfect cutting edge and tip alignment to maximize operational consistency and tool life. Handle coil springs, standard on pliers and cutters, allow faster action with reduced user fatigue. **(USA)**

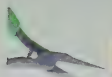
All Xcelite Cutters are 100% HAND-TUNED to exact tolerances.

Pliers - Investment Cast

Extra Thin Needle Nose

	TT No.	Model No.	Head Size	Jaw	OAL	PRICE
A	A 272PL128	NN54G	M	Smooth	5"	$20.02
	294PL176	NN54	M	Serrated	5"	$19.86
	294PL182	NN55	L	Serrated	5-1/2"	$19.74

Fine Point Needle Nose

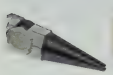


TT No.	Model No.	Head Size	Jaw	OAL	PRICE
294PL180	NN542	M	Serrated	5"	$20.02

Curved Needle Nose

	TT No.	Model No.	Head Size	Jaw	OAL	PRICE
B	B 294PL014	CN54G	M	Smooth	5"	$18.96
	294PL016	CN55G	L	Smooth	5-1/2"	$22.53
	826PL066	CN255	M	Serrated	5"	$20.88
	826PL064	CN255G	M	Smooth	5"	$21.79

Round Nose Wire Looping



TT No.	Model No.	Head Size	Jaw	OAL	PRICE
294PL200	RN54	S	Smooth	4-1/2"	$18.11

Flat Nose

TT No.	Model No.	Head Size	Jaw	OAL	PRICE
294PL030	DN54G	M	Smooth	5"	$15.42

Extra Long Needle Nose

	TT No.	Model No.	Head Size	Jaw	OAL	PRICE
C	826PL208	LN775512G	M	Smooth	5-1/2"	$19.82
	272PL777	NN7776	L	Serrated	6"	$18.93
	C 826PL164	NN7776G	L	Smooth	6"	$20.13

Subminiature Needle Nose

Easy Seller

	TT No.	Model No.	Head Size	Jaw	OAL	PRICE
D	D 791PL004	L4	S	Serrated	4"	$15.38
	791PL005	L4G	S	Smooth	4"	$17.17

Long Chain Nose

	TT No.	Model No.	Head Size	Jaw	OAL	PRICE
E	E 294PL116	LN54	M	Serrated	5"	$16.00
	294PL122	LN55	L	Serrated	5-1/2"	$17.34

Long Nose Side Cutting

	TT No.	Model No.	Head Size	Jaw	OAL	PRICE
F	294PL236	SN54	M	Serrated	5"	$18.96
	F 272PL120	SN55	L	Serrated	5-1/2"	$18.94

Cutters - Forged

Tapered Head Diagonal

	TT No.	Model No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
G	G 272PL475	S475NJS	L	Full Flush	Up to 18 AWG	5"	$16.66
H	H 294PL160	MS549J	S	Full Flush	Up to 20 AWG	4"	$17.01

Oval Head Diagonal

Easy Seller

	TT No.	Model No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
I	I 294PL144	MS54	S	Semi-Flush	Up to 18 AWG	4"	$15.42
J	J 294PL158	MS54J	S	Full Flush	Up to 18 AWG	4"	$17.38

Tapered Relieved Diagonal

	TT No.	Model No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
K	K 294PL150	MS543J	S	Full Flush	Up to 22 AWG (.025") Soft Copper	4"	$17.55
L	L 272PL424	S424NJS	S	Full Flush	Up to 20 AWG	4"	$22.43
M	M 272PL1415	S1415NJS	M	Full Flush	22 to 25 AWG Soft Copper 20 AWG Steel	5"	$20.48

Slim Tapered Diagonal

	TT No.	Model No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
N	N 272PL100	MS545	S	Flush	Up to 22 AWG (.025") Soft Copper	4"	$16.46
O	O 294PL154	MS545J	S	Full Flush	Up to 20 AWG	4"	$16.40

Angled Tip (Investment Cast)

TT No.	Model No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
791PL754	GA54J	S	Full Flush	Up to 22 AWG (.025") Soft Copper	4"	$27.60

Oval Head Standard Diagonal

	TT No.	Model No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
P	P 272PL5040	S54NKS	S	Semi-Flush	Up to 22 AWG (.025") Soft Copper	4-1/2"	$21.36
Q	Q 272PL555	S55NS	M	Semi-Flush	Up to 22 AWG (.025") Soft Copper	5"	$18.24

Angled Tip

TT No.	Model No.	Head Size	Cut	Cutting Capacity (AWG)	OAL	PRICE
294PL110	LC665J	S	Full Flush	Up to 20 AWG	4-1/2"	$31.73

Xcelite

SAVE!

Flush Cutters Set – 4 pc.

One each: oval head diagonal (294PL144); tapered relieved diagonal (294PL150); slim tapered diagonal (294PL154); angled tip (791PL754); vinyl pouch.

No. 272PL2000 .....$76.66

TECHNI-TOOL Tomorrow's Products Shipped Today
Phone: 1-800-832-4866 or 1-610-941-2400

All Xcelite Cutters are 100% HAND-TUNED to exact tolerances.

Xcelite Accu-Lite Pliers and Cutters

Ergonomic Accu-Lite handles feature lightweight, extended handle length for even application of force from all fingers. Smooth, soft foam cushion grips have ESD-safe material that is non-slip and compressible – allows positive gripping and absorbs mechanical shock. Contours adaptable for either right- or left-hand use.

Cutters

Oval Head Diagonal

TT No.	Model No.	Head Size	Cut	Cutting Cap (AWG)	OAL	PRICE
791PL010	EMS54	S	Semi-Flush	22 AWG (.025)	5-1/2"	$26.42

Tapered Head Diagonal

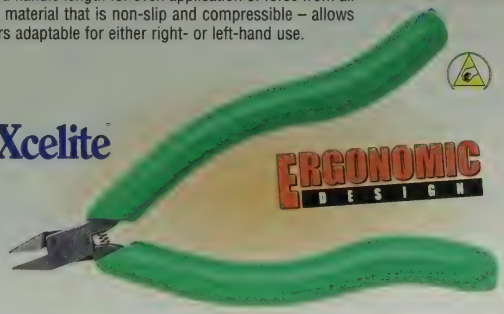
TT No.	Model No.	Head Size	Cut	Cutting Cap (AWG)	OAL	PRICE
791PL545	EMS545J	S	Flush	22 AWG (.025)	5-1/2"	$25.04

Relieved Tapered Head Diagonal

TT No.	Model No.	Head Size	Cut	Cutting Cap (AWG)	OAL	PRICE
791PL012	EMS543J	S	Flush	20 AWG (.034)	5-1/2"	$26.42

Angled Head

TT No.	Model No.	Head Size	Cut	Cutting Cap (AWG)	OAL	PRICE
791PL014	EGA54J	S	Flush	20 AWG (.034)	5-1/2"	$36.37



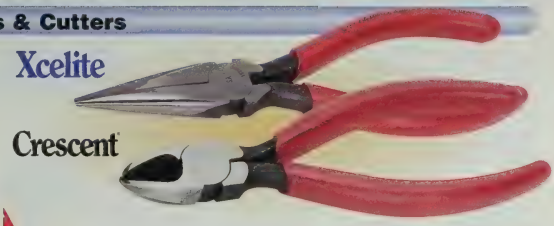
Pliers

Long Nose

TT No.	Model No.	Head Size	Jaw	OAL	PRICE
791PL018	ELN54	M	Serrated	6-1/2"	$25.50

Xcelite & Crescent Midget & Multipurpose Pliers & Cutters

These multipurpose pliers and cutters feature forged alloy steel construction, and precision machining. Cleanly machined and perfectly aligned jaws grip tightly while easy cutting is assured by hand-honed, mated cutting edges. Red plastic coated cushion grip for maximum leverage.



Xcelite Pliers

Chain Nose

TT No.	Model No.	Head Size	Jaw	OAL	PRICE
272PL059	59NCG	L	Serrated	8"	$25.47

Long Nose Plier w/Cutter

TT No.	Model No.	Head Size	Jaw	OAL	PRICE
272PL051	51NCGBK	L	Serrated	6"	$18.46

Needle Nose

TT No.	Model No.	Head Size	Jaw	OAL	PRICE
272PL064	57CG	L	Serrated	5-11/16"	$18.46

Crescent Pliers

Curved Needle Nose

TT No.	Model No.	Head Size	Jaw	OAL	PRICE
272PL888	8886SC	L	Serrated	6"	$17.41

Long Chain Nose

TT No.	Model No.	Head Size	Jaw	OAL	PRICE
272PL0336	10336CVN	L	Serrated	6-5/8"	$12.69

Xcelite Cutters

All-Purpose Diagonal

TT No.	Model No.	Head Size	Cutting Cap (AWG)	OAL	PRICE
272PL550	55NCGBK	L	Up to 14 AWG	5"	$16.99
272PL066	66NCG	L	Up to 14 AWG	6"	$20.75

Midget Diagonal

TT No.	Model No.	Head Size	Cut	Cutting Cap (AWG)	OAL	PRICE
272PL074	64CG	S	Semi-Flush	Up to 18 AWG	4"	$24.59
272PL054	54CG	S	Semi-Flush	Up to 14 AWG	4"	$19.41

Crescent Cutters

Diagonal

TT No.	Model No.	Head Size	Cut	Cutting Cap (AWG)	OAL	PRICE
272PL933	9336SCN	L	Semi-Flush	Up to 12 AWG	6"	$12.16

Xcelite Bending Pliers & Cutters

Xcelite Electronics Pliers Kit - 6 pc

A compact kit designed for the sophisticated electronics technician, consisting of the six most popular steel electronic pliers in a durable pocket-pouch. **Includes:** 4-1/2" transverse end cutting pliers; 4" diagonal cutting pliers; 5" long nose pliers with side cutter; 5" fine tip needle nose pliers; 5" flat nose pliers; 5" long nose pliers. **(USA)**
No. 272PL110 .....**$117.18**

KLEIN TOOLS Midget Pliers and Cutters

Midget pliers and cutters with induction hardening of cutting edges and pliers' heads. Made of forged steel. Hot riveted joints. Plastic-dipped, cushioned grip handles. ***Lifetime Warranty.***

KLEIN TOOLS

Pliers

Midget Long Nose

TT No.	Head Size	Jaw	OAL	PRICE
490PL160	M	Serrated	4-3/4"	$19.80
490PL162	M	Smooth	4-3/4"	$21.05

Midget Flat Nose

TT No.	Head Size	Jaw	OAL	PRICE
490PL164	M	Polished Inside	4-3/4"	$21.05

Cutters

Midget Diagonal Pointed Nose

TT No.	Head Size	Cut	OAL	PRICE
490PL058	L	Semi-Flush Cutting Knives	5"	$21.05
490PL056	M	Semi-Flush Cutting Knives	4-3/16"	$21.05

Midget Diagonal Standard

TT No.	Head Size	Cut	OAL	PRICE
490PL2455	L	Semi-Flush	5"	$24.75
490PL112	M	Semi-Flush	4-3/16"	$26.70

Cutters

Midget Diagonal

TT No.	Head Size	Cut	OAL	PRICE
490PL094	M	Semi-Flush	4-3/16"	$29.90

Midget Diagonal Extra Narrow Jaw

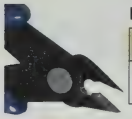
TT No.	Head Size	Cut	OAL	PRICE
490PL114	M	Flush	4-3/16"	$29.45
490PL102	L	Full Flush	5"	$30.70
490PL120	M	Flush	4-3/16"	$31.20

Low-Cost Shear Wire Cutters Best Seller

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
490PL118	S	Flush	Up to 14 AWG	5"	$9.50

PLATO Lead Cutters

Thin profile design for hard to reach areas. Effortless shearing action keeps blades sharp. Ergonomic design reduces strain on user. **(USA)**

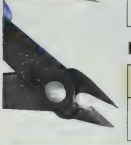


Platoshear 170

TT No.	Head Size	Cutting Cap. (AWG)	OAL	PRICE
657PL170	L	18 AWG copper wire (.040")	5.15"	$5.30

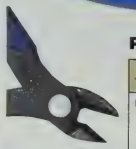
Ergonomic 170LX/175LX Lead Cutters

TT No.	Head Size	Cutting Cap. (AWG)	OAL	PRICE
657PL173	L	18 AWG copper wire (.040")	5.15'	$7.59
657PL174	L	18 AWG copper wire (.040") w/safety guard	5.15'	$10.29



Platoshear 170SD - ESD

TT No.	Head Size	Cutting Cap. (AWG)	OAL	PRICE
657PL171	L	18 AWG copper wire (.040")	5.15"	$10.02



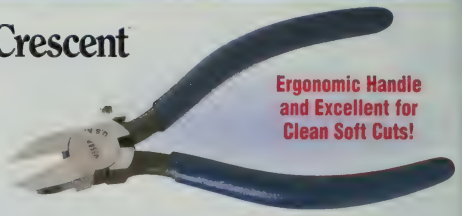
Plato Big Shear 1755

TT No.	Head Size	Cutting Cap. (AWG)	OAL	PRICE
657TI1755	L	Cuts round and flat cable, co-ax, nickel, Kovar and other wire	5.82"	$15.61

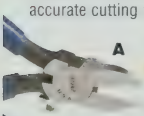
Crescent Plastics Cutting Tools

- Sharp, flush ground cutting edges and backs and a selection of head designs for close trimming and accurate cutting in confined areas
- Blue handle grips reduce fatigue and increase comfort

Crescent



Ergonomic Handle and Excellent for Clean Soft Cuts!



A

Heavy-Duty Diagonal Head Cutter

TT No.	Length		Cut	PRICE
A 272PL256	6	150mm	Flush	$20.50
272PL257	7	175mm	Flush	$22.96

B

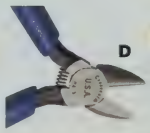
Ergonomic Heavy-Duty Head Cutter

TT No.	Length		Cut	PRICE
B 272PL562	7"	175mm	Flush	$23.23

C

Diagonal Head Cutter - Flush Ground

TT No.	Length		Cut	PRICE
C 272PL565	5	125mm	Flush	$13.57
272PL516	6	150mm	Flush	$17.76
272PL507	7"	175mm	Flush	$19.04



D

Thin Diagonal Relieved Head Cutter

TT No.	Length		Cut	PRICE
D 272PL043	4"	100mm	Flush	$14.83
272PL053	5"	125mm	Flush	$14.93
272PL6363	6"	150mm	Flush	$17.20
272PL073	7"	175mm	Flush	$18.85

Wiha ESD Safe Pliers and Cutters

Features: Two component handle with non-slip grip surface protects hand and reduces manual effort and fatigue. Box joint provides longer tool life. Mirror polish finish. Welded leaf spring. Hardened, annealed high carbon tool steel. Induction hardened cutting edges. (Germany)

Pliers

Snipe Nose (Chain Nose)

TT No.	Head Size	Jaw	OAL	PRICE
881PL2742	S	Serrated	4-3/4"	$40.54
881PL2744	S	Smooth - 45° Bent Nose	4-3/4"	$41.68

Needle Nose

TT No.	Head Size	Jaw	OAL	PRICE
881PL2746	L	Serrated	5-3/4"	$46.18
881PL2748	L	Smooth - 90° Bent Nose	5-3/4"	$46.18

Flat Nose

TT No.	Head Size	Jaw	OAL	PRICE
881PL2752	S	Smooth	4-3/4"	$40.54

Round Nose

TT No.	Head Size	Jaw	OAL	PRICE
881PL2750	S	Smooth	4-3/4"	$40.54

Cutters

Carbide Edge Wide Oval Head Diagonal

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
881PL2718	M	Semi-Flush	14 AWG	4-3/8"	$103.02

Oblique Angled (29°)

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
881PL2722	S	Flush	14 AWG	4-1/2"	$51.26
881PL2724	S	Full Flush	18 AWG	4-1/2"	$56.32
881PL2726	S	Semi-Flush	16 AWG	4-1/2"	$52.94

Oblique Front

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
881PL2728	S	Flush	22 AWG	4-3/8"	$49.54

Cutters

Tapered Head Diagonal

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
881PL2703	S	Semi-Flush	18 AWG	4-1/2"	$45.04
881PL2705	S	Flush	18 AWG	4-1/2"	$44.60
881PL2706	S	Semi-Flush	14 AWG	4-1/2"	$44.94
881PL2708	S	Flush	16 AWG	4-1/2"	$45.04
881PL2710	S	Full Flush	18 AWG	4-1/2"	$49.54
881PL2711	S	Flush	16 AWG	4-1/2"	$47.30

Tapered & Relieved Head Diagonal

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
881PL2702	S	Semi-Flush	18 AWG	4-1/2"	$46.18
881PL2704	S	Flush	18 AWG	4-1/2"	$46.18

Slim Oval Head Diagonal

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
881PL2712	S	Flush	18 AWG	4-1/2"	$45.04
881PL2714	S	Full Flush	18 AWG	4-1/2"	$50.14
881PL2716	S	Semi-Flush	14 AWG	4-1/2"	$45.04

Wide Oval Head Diagonal **Has wire trapping device*

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
881PL2720	M	Flush	14 AWG	4-1/2"	$44.48
881PL2721*	M	Flush	16 AWG	4-1/2"	$46.18

Extra Slim End Transverse End

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
881PL2732	S	Flush	22 AWG	4-3/8"	$50.70

Wide Head End

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
881PL2734	S	Flush	14 AWG	4-1/2"	$50.70

C.K SensoPlus® Pliers & Cutters

Optimized grain structure and tool strength result from hot drop forging blanks from selected, purpose-oriented high alloy carbon and chrome-vanadium-steels. Precision box joint for smooth action and exact guidance of jaws without the need for readjustment. Spot-welded double leaf spring ensures consistently repeatable functioning. With slip-free thermoplastic material compound grips. ESD-safe. (Germany)

Pliers

A

Snipe Nose

TT No.	Head Size	Jaw	OAL	PRICE
A 217PL372	S	Smooth	5-1/4"	$44.06
217PL3777	L	Serrated	6-1/2"	$50.75

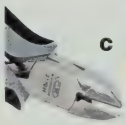
B

Flat Nose

TT No.	Head Size	Jaw	OAL	PRICE
B 217PL770	S	Smooth	5-1/4"	$44.06

Cutters - Tungsten Carbide

For Medical Wire



C

Side Cutters, Tapered and Relieved Head

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
C 217PL327	S	Semi-Flush	22 AWG Piano/ 18 AWG Hard/ 16 AWG Nickel	5"	$136.03

Cutters

D

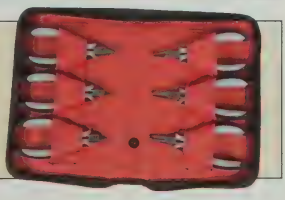
Oblique

TT No.	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
D 217PL763	S	Flush	20 AWG Copper	5-1/4"	$69.05

C.K. Cutters and Pliers Kit - 6 pc

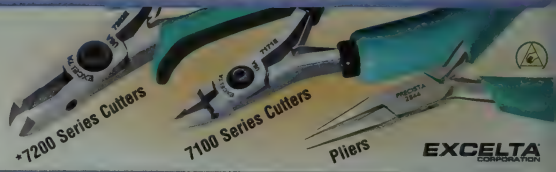
Includes: One each: 217PL372, 217PL556, 217PL737, 217PL763, 217PL770, and 217PL880.

No. 217PL703.....$351.09



EXCELTA Mini Electronics Pliers & Cutters

ESD-safe mini electronics pliers and cutters are made with 1% carbon forged tool steel for excellent strength. Induction hardened with bearing ring segment joint. Cutters feature Rockwell 63/65 HR^c blade hardness, anti-friction Delrin washer and protective cap plus dual sleeve, cushioned ergonomic handles. Pliers feature foam cushion grip, box joint and dual leaf spring. (USA, Pakistan)



Cutters

Diagonal Relieved Oval

	TT No.	Head Size	Cut	Cutting Capacity	OAL	PRICE
A	352PL025	M	SF	.015"-.050" Soft Wire	5-1/2"	$69.24

Diagonal Oval Head

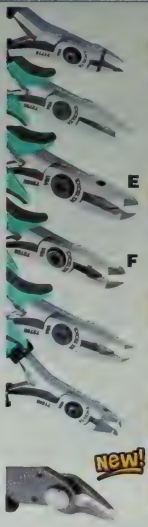
	TT No.	Head Size	Cut	Cutting Capacity	OAL	PRICE
B	352PL039	S	SF	.010"-.040" Soft Wire	5-1/2"	$66.79
	352PL7141	S	F	.008"-.040" Soft Wire	5-1/2"	$68.54
	352PL7142	S	FF	.004"-.032" Soft Wire	5-1/2"	$73.74
	352PL240*	S	SF	.010"-.040" Soft Wire	4-1/4"	$63.33
	352PL724*	S	F	.008"-.040" Soft Wire	4-1/4"	$65.26
	352PL242*	S	FF	.004"-.032" Soft Wire	4-1/4"	$70.20

Diagonal Tapered

	TT No.	Head Size	Cut	Cutting Capacity	OAL	PRICE
C	352PL056	S	F	.008"-.040" Soft Wire	5-1/2"	$71.36
	352PL064	S	FF	.004"-.032" Soft Wire	5-1/2"	$79.06
	352PL244*	S	F	.008"-.040" Soft Wire	4-1/4"	$68.14

Diagonal Tapered Relieved

	TT No.	Head Size	Cut	Cutting Capacity	OAL	PRICE
	352PL7146	S	SF	.010"-.036" Soft Wire	5-1/2"	$70.56
	352PL063	S	F	.008"-.036" Soft Wire	5-1/2"	$72.91
D	352PL7148	S	FF	.004"-.028" Soft Wire	5-1/2"	$80.67
	352PL247*	S	F	.008"-.036" Soft Wire	4-1/4"	$69.40
	352PL248*	S	FF	.004"-.028" Soft Wire	4-1/4"	$77.40



Relieved Tip

TT No.	Head Size	Cut	Cutting Capacity	OAL	PRICE
352PL171	M	FF	30 AWG Soft Wire	5-3/4"	$115.84

Tapered Relieved Tip

352PL7270*	L	FF	24 AWG Soft Wire	5"	$91.69

Angulated Relieved Tip Cutters

	TT No.	Head Size	Cut	Cutting Capacity	OAL	PRICE
E	352PL7282*	L	FF	22 AWG Soft Wire	5"	$92.51
F	352PL272*	L	FF	20 AWG Soft Wire	5"	$92.51

Mini Angulated Relieved Tip

TT No.	Head Size	Cut	Cutting Capacity	OAL	PRICE
352PL7275*	L	FF	26 AWG Soft Wire	5"	$96.13

Angulated Head

TT No.	Head Size	Cut	Cutting Capacity	OAL	PRICE
352PL183	M	FF	30 AWG Soft Wire	5-3/4"	$99.61

Shear Cutter

TT No.	Head	Cutting Capacity	OAL	PRICE
352PL055	Tapered	Up to 20 AWG	5"	$11.27

Pliers

STAINLESS STEEL

Curved Tip

TT No.	Head Size	Jaw	OAL	PRICE
352PL629	S	Curved Smooth	4-1/2"	$15.47

Round Nose

352PL643	M	Round Smooth	4-1/2"	$15.47

Chain Nose Beveled Edge

352PL644	M	Smooth	4-1/2"	$15.47

Needle Nose

352PL647	M	Smooth	4-1/2"	$15.47

Curved Tip Small Long Chain Nose

TT No.	Head Size	Jaw	OAL	PRICE
352PL829	M	Curved Smooth	5"	$16.79

Small Long Needle Nose

352PL847	M	Smooth	5"	$16.79

Small Long Chain Nose

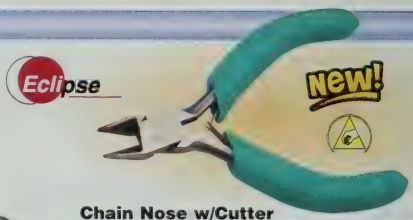
352PL047	M	Smooth	5"	$16.79
352PL026	M	Serrated	5"	$18.21

Small Long Flat Nose

352PL2842	M	Smooth	5"	$16.79

Economy ESD Pliers and Cutters

All the features and performance you would expect from much high priced pliers and cutters at an economical price. **Features:** High-grade alloy-steel; Induction hardened cutting edges; Double leaf springs; Hot drop forged; Oil hardened and tempered; Hot-formed box joints; ESD cushioned grips. (Taiwan)



ESD Cutter

TT No.	Head	Cut	OAL	PRICE
711PL005	Oval	Semi-Flush	4-1/4"	$12.00
711PL006	Diagonal	Semi-Flush	4-1/4"	$12.00

ESD Pliers

Needle Nose

TT No.	Head Size	Jaw	OAL	PRICE
711PL007	M	Smooth	6"	$12.00

Duck Bill

711PL008	S	Smooth	5"	$12.00

Chain Nose w/Cutter

TT No.	Head Size	Jaw	OAL	PRICE
711PL009	S	Serrated	6"	$12.00

Bent Chain Nose

TT No.	Head Size	Jaw	OAL	PRICE
711PL010	S	Smooth	4-3/4"	$12.00

Round Nose Looping

TT No.	Head Size	Jaw	OAL	PRICE
711PL011	S	Smooth	5"	$12.00

TEC-CUT Standard & Heavy Duty Pliers & Cutters

All feature foam grips for added comfort and visibility, all are made from 1060-carbon steel and meet ANSI requirements.

MADE in the USA

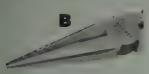
Pliers

A

Slim ESD Needle Nose, Bent 75°

TT No.	Jaw	OAL	PRICE
A 758PL011	Serrated	6-1/2"	$15.30

B



Long Nose with Side Cutter

TT No.	Jaw	OAL	PRICE
B 758PL0016	Serrated	6-5/8"	$16.80

C

N.E. Style Linemans'

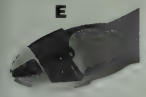
TT No.	Jaw	OAL	PRICE
C 758PL214	Diamond-Serrated	9"	$20.60

D

N.E. Style Linemans' w/Crimp Die for Insulated & Non-Insulated Terminals

TT No.	Jaw	OAL	PRICE
D 758PL215	Diamond-Serrated	9"	$20.60

E



Terminal Crimping

TT No.	Cutting Cap. (AWG)	OAL	PRICE
E 758PL033	Insulated & Non-Insulated 10-22 AWG	9-3/4"	$22.00
758PL5032	Non-Insulated 10-22 AWG	9-3/4"	$23.90

F

Slip Joint

TT No.	Jaw	OAL	PRICE
F 758PL031*	Dual Position Jaw	6"	$5.95
758PL207		6"	$11.75
758PL037*		8"	$7.25
758PL208		8"	$12.75

Made in Taiwan

G

Tongue & Groove

TT No.	Jaw	OAL	PRICE
G 758PL209	4-position	5"	$11.95
758PL210	5-position	7"	$11.35
758PL211	6-position	10"	$13.95

Cutters

G

Diagonal w/Skinning Hole

TT No.	Cutting Cap. (AWG)	OAL	PRICE
G 758PL002	.052 skinning hole for 16 AWG	5"	$16.95
758PL219		6"	$16.75

H

Diagonal Side

TT No.	Cutting Cap. (AWG)	OAL	PRICE
H 758PL004	12 AWG	6"	$15.25
758PL2246*	12 AWG	8"	$15.50

Non-ESD, Made in China

Cutters

I

Heavy-Duty Diagonal Side

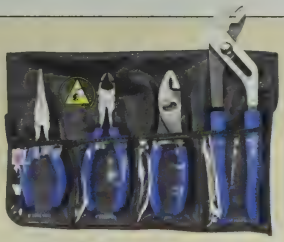
TT No.	Cutting Cap. (AWG)	OAL	PRICE
I 758PL218	12 AWG	8"	$17.55

TEC-CUT

Multi-Tool Kit - 4 pc

Includes: (1) 10" groove joint; (1) 6" slip joint; (1) 6" diagonal cutter with skin hole; (1) 6" long nose.

No. 758PL221 ....$58.05

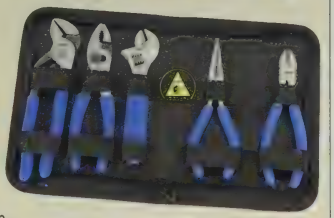


Best Seller

Multi-Tool Kit - 5 pc

Includes: one each: 6-5/8" long chain nose w/side cutter; 6" heavy duty tapered head cutter; 7" groove joint pliers; 6" slip joint pliers; 6" adjustable wrench. Includes and zipper black case.

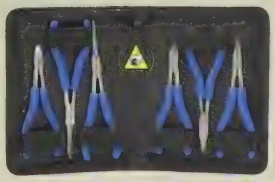
No. 758PL9000.....$77.10



Long-Reach Electronics Pliers & Cutters Kit - 6 pc

For reaching hard to grip areas. Meet or exceed ANSI and GSA specs. **Kit Contains:** diagonal oval head cutter, 5.6" OAL; chain nose pliers with cutter, 6.2" OAL; needle nose pliers, 7.2" OAL; flat nose pliers, 6.2" OAL; diagonal cutter, 5.6" OAL; 45° needle nose pliers bent, 6.9" OAL; plus handy carrying case.

No. 758PL038.....$93.60



Plastic Pliers

Non-metallic Pliers

Protect your soft materials from unwanted scratches or dents. Made of nylon and glass fibers with return spring.

MADE in the USA

Pliers

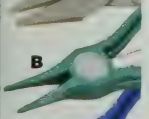
A

Flat Nose

TT No.	Jaw	OAL	PRICE
A 420PL014*	Smooth	5-3/4"	$6.70

No return spring

B



Straight Chain Nose

B 461PL620	Smooth	5-3/4"	$11.50

C

Curved Long Nose

C 461PL621	Curved, 45°	5-3/4"	$11.50

D

Blunt Nose

TT No.	Jaw	OAL	PRICE
D 461PL622	Smooth	5-3/4"	$11.50

E

Needle Nose

E 461PL623	Smooth	5-3/4"	$11.50

F

Round Nose

F 461PL624	Smooth	5-3/4"	$11.50

G

Stone Setter

G 461PL625	Smooth	5-3/4"	$11.50

Crescent Standard & Heavy Duty Pliers & Cutters

Made of forged alloy tool steel and individually tested for strength. Polished head with red non-slip cushion handle grips.

MADE in the USA

Pliers

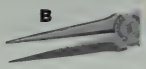
Long Needle Nose

A

TT No.	Model	Jaw	OAL	PRICE
A 272PL7777	7777CVN	Serrated	7-15/32"	$15.66

Long Chain Nose with Side Cutter

B



TT No.	Model	Jaw	OAL	PRICE
B 272PL6546	6546CVSMLN	Serrated	6-5/8"	$15.66
294PL242*	6546SCN	Serrated	6-5/8"	$16.19
272PL082*	6547SCN	Serrated	7-1/2"	$18.37

** with spring*

Lineman's High Leverage Pliers

C

TT No.	Model	Jaw	OAL	PRICE
C 272PL0509	20509CVSMLN	Serrated	9-1/4"	$20.86

Curved Needle Nose

D

TT No.	Model	Jaw	OAL	PRICE
D 272PL888	8886SC	Serrated	6"	$17.41

Long Chain Nose

E

TT No.	Model	Jaw	OAL	PRICE
E 272PL0336	10336CVN	Serrated	6-5/8"	$12.69

Thin Straight Nose Combo, Slip Joint

F

TT No.	Model	Jaw	OAL	PRICE
F 294PL170	L26CV	2-Position: 1" Capacity w/milled teeth & wire cutter	6-3/4"	$6.37

Combination Slip Joint

New!

G

TT No.	Model	Jaw	OAL	PRICE
G 272PL027*	H26N	Low profile riveted joint, 2-Position; with deep wire cutter	6"	$5.26

**Forged alloy steel with nickel-chrome finish, no coating*

A-N Connector

H

TT No.	Model	Jaw	OAL	PRICE
H 272PL2910*	52910N	3-Position: 3/4" to 2-1/2" Capacity; w/nylon inserts	10"	$27.23

**Plated metal handles, no coating*

Replacement jaws
No. 272PL910 .....$4.46

Pliers

Midget Utility, Slip Joint

I

TT No.	Model	Jaw	OAL	PRICE
I 272PL046	50CG	Narrow, 3-Position; 1/2" Capacity	5"	$10.13

Groove Joint

J

TT No.	Model	Jaw	OAL	PRICE
K 272PL162	R27CV	Straight, 4-Position; 1-1/8" Capacity	7"	$9.22
272PL154	R210CV	Straight, 5-Position; 1-1/2" Capacity	10"	$10.13

Cutters

All-Purpose Diagonal

L

TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
L 272PL550	55NCGBK	Up to 14 AWG	5"	$16.99
272PL066	66NCG	Up to 14 AWG	6"	$20.75

Heavy-Duty Diagonal

M

N

TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
M 272PL5437	5437CEN	Up to 22 AWG	7"	$14.69
N 272PL5427	5427CVN	Up to 12 AWG	7"	$14.86
272PL058	5428CN		8"	$17.06

Heavy-Duty Diagonal – BX Cable

O

TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
O 272PL102	7427CVN	Up to 12 AWG; will cut BX armored cable	7"	$18.37

Crescent

Pliers Kit - 5 pc

Includes: 6" long nose plier, 7" groove joint plier, 6" slip joint plier, 6" diagonal plier, 8" chrome adjustable wrench. Plastic coated handles. Case Included.

No. 294PL198.....**$72.61**

Crescent ProSeries Compound Action Pliers

Compound leverage design increases cutting power by 50%!
Made from Chrome vanadium steel and features co-molded grips for comfort. Heat treated joint for consistent operation with induction hardened edges for long cutting life.

1/3 LIGHTER THAN STANDARD PLIERS!

A

ProSeries Diagonal Compound Action

TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
A 272PL429	PS5429C	Up to 11 AWG	9"	$17.55

B

ProSeries Lineman Compound Action

TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
B 272PL509	PS20509C	Up to 11 AWG	9"	$16.02

C

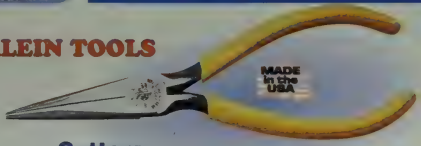
ProSeries Long Nose Compound Action

TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
C 272PL549	PS6549C	Up to 11 AWG	9"	$16.88

KLEIN TOOLS Standard & Heavy Duty Pliers & Cutters

Long Nose & Lineman's

- Induction hardened, long-lasting cutting knives
- Knurled jaws for sure wrapping and looping
- Spring-loaded action for self-opening



Pliers

Long Nose

TT No.	Model	Jaw	OAL	PRICE
A 490PL122	D301-5C	Knurled	5-5/8"	$19.90
490PL124	D301-6C	Knurled	6-5/8"	$20.30

Long Nose, Side Cutting

TT No.	Model	Jaw	OAL	PRICE
B 490PL038	D203-5C	Knurled	5-5/8"	$22.35
490PL203	D203-6C	Knurled	6-5/8"	$22.75

Cutters

High-Leverage, N.E. Type Side Cutters

TT No.	Model	Jaw	OAL	PRICE
C 490PL213	D213-9NE-CR	Knurled; w/crimp die	9-1/4"	$40.50
490PL068*	D213-9NE	w/o crimp die	9-1/4"	$30.75

*Blue coated handles

Needle Nose Pliers

- Hot-riveted joint ensures smooth action and no handle wobble
- Slim head design for working in confined areas
- Spring-loaded for self-opening action

Pliers

Long Needle Nose

TT No.	Model	Jaw	OAL	PRICE
A 490PL170	D328-51/2C	Smooth	5-13/32"	$23.50

Extra-Slim Needle Nose

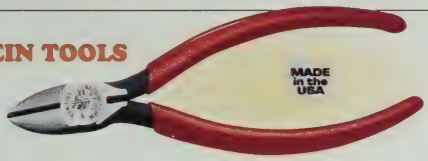
TT No.	Model	Jaw	OAL	PRICE
B 490PL172	D335-51/2C	Knurled	5-1/2"	$25.80

Curved Needle Nose

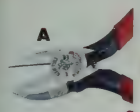
TT No.	Model	Jaw	OAL	PRICE
C 490PL174	D338-51/2C	60°	5-1/2	$25.80

Cutting and Crimping

- Trims plastic or printed circuit boards
- Easy working in confined areas



Cutters



Standard Diagonal with Spring

TT No.	Model	Cut	OAL	PRICE
A 490PL060	D210-5C	Semi-Flush	5-9/16"	$28.80

Standard Diagonal with Tapered Nose

B 490PL032	D202-5C	Bevel	5-9/16"	$24.95
490PL2026	D202-6	Bevel	6-1/8"	$24.50

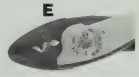
Heavy-Duty Tapered Head

Heavier design for all-purpose use!

TT No.	Model	Cut	OAL	PRICE
C 490PL108	D252-6	Bevel	6-1/8"	$25.50

High-Leverage Diagonal w/Angled Head

TT No.	Model	Cut	OAL	PRICE
D 490PL2488	D248-8	Bevel	8-1/16"	$25.10



Terminal Crimping Tool

TT No.	Cutting Cap. (AWG)	OAL	PRICE
E 490ST016	Insulated & Non-Insulated 10-22 AWG	9-3/4"	$28.55
490PL010*	Non-Insulated 10-22 AWG	9-3/4"	$29.50

*Black coated handles

KLEIN TOOLS Journeyman Professional-Grade Pliers & Cutters

KLEIN TOOLS

- Dual material handle with soft outer surface and durable inner surface
- Induction hardened cutting knives
- High-leverage design for greater cutting power

Pliers
Yellow Grip

Cutters
Blue Grip

Pliers

Heavy Duty Long Nose, Side Cutting

TT No.	Model	Jaw	OAL	PRICE
A 490PL2038	J203-8	serrated with cutter	8-9/16"	$34.95

Heavy Duty Long Nose, Side Cutting & Stripping

TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
B 490PL0203	J203-8N	cleanly strips 12 AWG wire	8-9/16"	$36.25

Cutters

Heavy-Duty, Side-Cutting

TT No.	Model	Cutting Cap. (AWG)	OAL	PRICE
C 490PL2009	J2000-9NE	11 AWG	9-1/2"	$46.45

Diagonal

D 490PL2048	J2000-48	12 AWG	8-1/8"	$38.85

Connector Crimping, Heavy Duty Cutting

E 490PL009	J2000-9NECR	11 AWG	9-1/2"	$54.60

Soft Jaw Pliers

TECHNI-TOOL

Great for electrical connectors, plated pipe and fittings, camera lenses and more!

Best Seller

MADE IN THE USA

Stamped Steel Soft Jaw Pliers

TT No.	Jaw	OAL	PRICE
758PL035	Sleeve-Type; 4-position; 3/4" to 2-1/2" Capacity	10-1/4"	$21.54

Replacement Jaw Sleeves for 758PL035
No. 758PL3516 .....$4.74

Forged Steel Soft Jaw Pliers

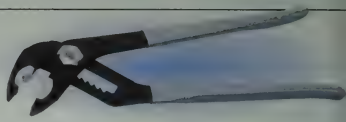
TT No.	Jaw	OAL	PRICE
758PL0045	Sleeve-Type; 4-position; 3/4" to 2-1/2" Capacity	10-1/4"	$30.16

Replacement Jaw Sleeves for 758PL0045
No. 758PL4516 .....$4.74

Soft Touch Needle Nose Pliers

Spring-loaded, soft nylon jaw needle nose plier with side cutter and steel serrated grip jaw. Includes spare set of jaws. Vanadium steel with electric black finish. 6-3/4" OAL.
No. 189PL5680.....$24.00

Soft Touch No Mar Pliers



Eight-position, spring-loaded, high-carbon steel, adjustable slip joint. Spare jaws available. Synthetic resin jaws. 1-1/2" (46 mm.) jaw opening. 10" (250 mm) OAL.
No. 189PL250 .....$19.95

Replacement Jaw
No. 189PL5702.....$4.95

Irwin® Vise-Grip® Locking Pliers

Features

- Curved jaw puts tremendous pressure on four points of any style nut or bolt head
- Ideal for tightening, clamping, twisting and turning
- Turn screw to adjust pressure and fit work. Stays adjusted for repetitive use
- Constructed of high-grade heat-treated alloy steel for maximum toughness and durability
- Guarded release trigger quickly unlocks and protects from accidental release
- Hardened teeth are designed to grip from any angle

IRWIN VISE-GRIP

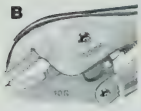
Curved Jaw Locking Pliers with Wire Cutter

A

TT No.	Jaw Adjustment	Jaw Thickness	OAL	PRICE
644WR040	15/16"	7/32"	4"	$11.39
644WR020	1-1/4"	1/4"	5"	$12.43
A 644WR030	1-5/8"	5/16"	7"	$13.60
644WR014	1-7/8"	7/16"	10"	$14.56

Straight Jaw Locking Pliers

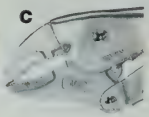
B



TT No.	Jaw Adjustment	Jaw Thickness	OAL	PRICE
B 644WR028	1-1/8"	1/2"	7"	$12.73
644WR012	1-5/8"	1-5/8"	10"	$13.72

Curved Jaw Locking Pliers

C



TT No.	Jaw Adjustment	Jaw Thickness	OAL	PRICE
C 644WR026	1-5/8"	5/16"	7"	$13.26
644WR010	1-7/8"	7/16"	10"	$14.17

Long Nose Locking Pliers with Wire Cutter

D

TT No.	Jaw Adjustment	Jaw Thickness	OAL	PRICE
644WR021	1-5/8"	1/8"	4"	$13.26
D 644WR022	2-1/4"	5/32"	6"	$14.46
644PL014	2-7/8"	3/16"	9"	$17.18

New!

S-K PROFESSIONAL TOOLS

Compound Joint Pliers Set - 2 pc

Allows access to long narrow openings with minimal handle movement. Comfortable vinyl handles. Quality riveted joints and perfectly aligned jaws. Made from Chrome Vanadium steel. **Includes:** 13" long reach needle nose and 12.75" long reach 45° bent nose compound joint plier.
No. 690PL7850 .....$87.76

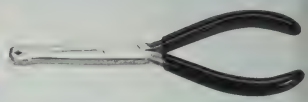
Tongue and Groove Pliers

MADE IN THE USA

Right angle teeth grip in all directions for maximum bite and minimum wear. Undercut tongue and groove design assures the strongest, non-slip jaw lock. Channellock Blue® dipped plastic comfort grips.

5 position jaw adj., 1-1/2" (38mm) capacity, 9-1/2" (240mm) OAL (Shown)
No. 235PL420 (420) $17.80

7 position jaw adj., 2" (51mm), 10" (250mm) OAL
No. 235PL430 (430) $17.80



Multi-Nut Pliers

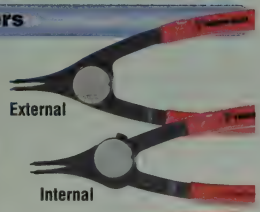
Designed specifically for gripping small nuts and fasteners while tightening other end with a conventional wrench. 2-1/4" jaws reach into recessed areas. Grips nuts smaller than 1/8" up to 9/16" from side or end. Box jointed, made from brushed stainless steel with comfortable PVC grips. 7-1/2" OAL.
No. 354PL698.....$14.30

TECHNI-TOOL

Cam-Lock Convertible Pliers

Just push button and turn knob to instantly switch from internal to external pliers! Cushioned grip handles for comfort. **(USA)**

TT No.	Tip Diameter	PRICE
758PL1204	.038 (1/4" – 1" dia. rings)	$19.38
758PL3204	.047 (11/16" – 1-3/8" dia. rings)	$19.92
758PL3404	.070 (15/16" – 2" dia. rings)	$21.00



Convertible Pliers

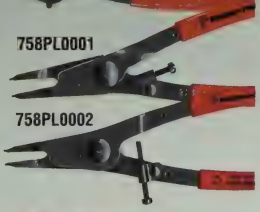
Switch from internal to external with no threads to align or tighten! 1/4 turn of locking screw releases halves, another 1/4 turn retightens. Cushioned grip handles for comfort. **(USA)**

TT No.	Tip Diameter	PRICE
758PL1202	.038 (1/4" – 1" dia. rings)	$14.00

Fixed Tip Industrial Pliers

Fitted with spring and stop so you don't break small rings. Cushioned grips. **(USA)**

TT No.	Tip Diameter	PRICE
758PL0001	Internal; Tip Diameter: .038	$16.16
758PL0002	External; Tip Diameter: .038	$16.16



Grip Ring Pliers

Tips precision ground to work small grip rings. Removes and installs both metric (1.5 – 4.0mm) and SAE (5/64" – 5/32") rings. Return spring and stop. Cushioned grips. **(USA)**

No. 758PL5105 (5205R) **$21.00**

Snap Ring Pliers Kit - 10 pc

Three basic tip diameters handle most external and internal rings.

Includes: Internal and external plier, eight pairs of assorted replaceable tips. **(USA)**

No. 758PL4440 Kit **$34.02**

Convertible Retaining Ring Pliers with Replaceable Tip

Reversing mechanism is the fastest and easiest on the market. Tough steel construction with ergonomic anti-slip sealed-air pocket grip for comfort. Heavy duty return spring. 5 tip options handle both internal and external rings. Storage pouch. **Capacity:** Internal: 1/4" – 1"; External: 1/8" – 1"; Tip Set: .024", .038", .047" Straight; .038" and .047" 90°.

No. 568PL094 .....**$26.87**

Wire Twisters

TECHNI-TOOL

Reversible Wire Twisters

Reversible actions for right or left twist. Oval shaped throat area is cushioned to hold clipped wires. Polished finish for improved rust protection. **(USA)**

No. 758PL025 (25W) 6" **$102.30**

No. 758PL026 (26W) 9" **$102.30**

Standard Jaw

NSN 5120-01-429-8147

No. 758PL045 (45W) 6" **$96.48**

NSN 5120-01-429-8153

No. 758PL0042 (41W) 9" **$96.48**

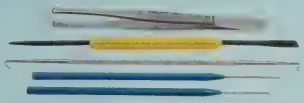
Right-Hand Twister w/Automatic Return

12"; Diagonal Nose. **(USA)**

No. 758PL2393 (2W393) **$96.92**

TECHNI-TOOL

O-Ring Tool Kit - 5 pc



Designed for replacement of O-Rings, gaskets, bearings, seals, etc. on pneumatic and hydraulic devices. Constructed of the finest surgical stainless steel for corrosion resistance to all working fluids. Suitable for cleanroom. Packed in a reusable, vinyl pouch, the kit contains a tweezer, piercing probe, prying probe, flat face pry, scrape tool and hook for lifting. **(USA)**

No. 758TT393 .....**$14.50**

O-Ring Kit - 382 pc

Includes: 1/6" thick 1/8", 5/32", 7/32", 1/4", 5/16", and 3/8" I.D.; 3/32" thick 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", and 3/4" I.D.; 1/8" thick 3/4", 13/16", 7/8", 15/16", 1", 1-1/16", 1-1/8", 1-3/16",1-1/4", 1-5/16", 1-3/8", 1-7/16", 1-1/2" I.D.; 3/16" thick 1-1/2", 1-5/8", 1-3/4" I.D. **(USA)**

No. 449PR382 .....**$28.03**

Insulated Tools

Wiha

Insulated Plier, Cutter, Screwdriver Set - 14 pc

Pliers drop-forged from special tool steel, hardened, chrome and nickel plated. Screwdriver has soft finish handle with cushion grip and 1000V insulation molded into blade. 5" blade made of high-alloy chrome-vanadium-molybdenum steel, hardened, black finish. **Includes:** Pliers: 8" long nose; 9" combination; 6.3" stripping. Cutters: 6.3" side cutter; 8" high leverage cutter. Insulated Screwdrivers: Phillips: #1, #2, #3; Slotted: 2.0", 2.5", 3.0", 3.5", 4.5", 6.5". Zipper case.

No. 881PL2895 .....**$314.12**

1000V IEC

1000V Insulated Tool Kit - 11 pc

11 piece tool kit insulated for use up to 1000V. **Includes:** Combination plier (200mm); Side cutter (160mm); Long nose plier (200mm); Long nose plier (160mm); (3) Phillips screwdrivers: #0 x 60mm, #1 x 80mm, #2 x 100mm, (4) slotted screwdrivers: 2.5 x 0.4 x 75mm, 4.0 x 0.8 x 100mm, 5.5 x 1.0 x 125mm, 6.5 x 1.2 x 150mm; Zippered carrying case. (Taiwan)

No. 711PL218 .....**$110.00**

AC 1000 V

Insulated Screwdriver Set – 12 pc

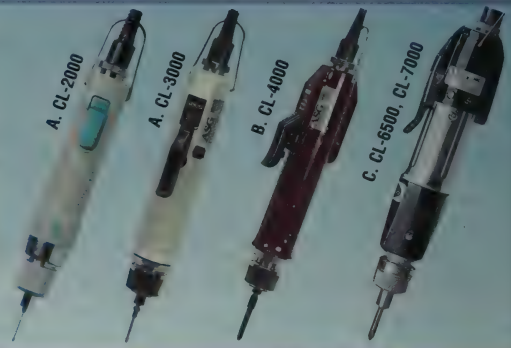
12 interchangeable Insulated screwdriver blades with 2 component handles. Blades tested to 10,000 volts. Precision cap and soft grip zone on blades for low torque applications. Secure fit blades, automatic lock against unwanted extraction. **Includes:** Slotted: 2.5mmL x 0.4mmW, 3.0mmL x 0.5mmW, 3.5mmL x 0.6mmW, 4.0mmL x 0.8mmW, 5.5mmL x 1.0mmW, 6.5mmL x 1.2mmW, Phillips: #1, #2, #3; Pozidrive: PZ2; Torx: T10, T15, T15; storage box.

No. 204SC001 .....**$75.60**

ASG Products for Assembly

Torque Drivers

ASG Products for Assembly — Best Sellers



High Performance CL Series Drivers

A. Gentle Palm Size: 2.7-27 ozf/in.
For miniature screws. Weighs only 7.5 oz; 4.0mm collet. Adjustable torque clutch,automatically stops to eliminate over-tightening. 1.5 amps. Models CL-2000 and CL-3000.

B. Medium Size: .5 - 4.5 lbf/in.
Most versatile light torque tool in the series. Choice of a 1/4" hex or 4.0mm collet. When selected torque is reached, drivers stop motor rotation to prevent over or under-tightening. 2.5 amps. Models CL-4000.

C. Standard Size: 1.2 - 20 lbf/in.
For mid-range torque applications, #1 - #10 screws (2.0mm - 5.0mm). Tamper resistant torque nut standard. Models CL-6500 and CL-7000.

C. Push-to-Start Models (PS)
3.25 lbs of downward pressure starts these tools. Helps prevent "cam-out" and excessive bit wear. Models CL-6500-PS and CL-7000-PS. *All other models are lever start.*

TT No.	Model	Torque	Appx. RPM @30VDC	Appx. RPM @20VDC	Drive Size	PRICE
106SC107	CL-2000	2.7-27 ozf/in.	680	490	4.0 mm	$530.25
106SC4109	CL-3000	3-25 ozf/in.	1000	670	4.0 mm	$527.30
106SC111	CL-4000	.5-4.5 lbf/in.	1000	670	4.0 mm	$535.95
106SC641	CL-4000	.5-4.5 lbf/in.	1000	670	1/4" hex	$535.95
106SC121	CL-6500	1.2-14 lbf/in.	910	600	1/4" hex	$662.65
106SC120	CL-6500-PS	1.2-14 lbf/in.	910	600	1/4" hex	$662.65
106SC124	CL-7000	2.5-20 lbf/in.	750	500	1/4" hex	$716.10
106SC125	CL-7000-PS	2.5-20 lbf/in.	750	500	1/4" hex	$716.10

Increase productivity by replacing parts less often!

Brushless BL Series Torque-Controlled Drivers

Brushless motor, all-metal gears and no mechanical switches mean these drivers last longer and you have less downtime. For medium to light torque applications using #1 to #4 screws (2.0mm to 3.0mm). Automatically stops when pre-set torque is reached avoiding over- or under-tightening. Convert from a lever-start to push-to-start in seconds. Easily adjusted torque. Ergonomically shaped grip and compact design. 6 ft. detachable cord. 12.7 oz. *Tamper proof torque nut available. T-70 power pack required for operation.*

TT No.	Model	Torque	Appx. RPM	Drive Size	PRICE
106SC4271	BL-5000	2 – 11 lbf/in.	1000	4.0mm	$819.90
106IN4275	BL-5000			1/4" hex	$819.90
106SC5500	BL-5000 ESD			4.0mm	$1,070.20
106SC5501	BL-5000 ESD			1/4" hex	$1,070.20
106SC5504	BL-7000	5-21 lbf/in.	1050	1/4" hex	$899.35
106SC5506	BL-7000HT	5-30 lbf/in.	740	1/4" hex	$909.35

BL-5000

BL-7000

T-70

T-70 Power Pack for BL Series
Max. Amp.: 4; Max. No. Drivers: 1; Approx. Output: 31VDC; Input: 120VAC.
No. 106SC4273 .....$299.75

ASG Products for Assembly

Power Packs

For CL-Series, SS and A Series

CLT Power Packs for Drivers

Fused input voltage and circuit breaker protection on output voltage. Switchable output voltage provides two-speed option for drivers.

CLT-50 Single Power Pack
No. 106MI163 .....$280.00

CLT-100 Dual Power Pack
No. 106SC174 .....$539.95

For single tool: CL, SS, TL, BL and A Series

PS-55 Single Power Source

Switchable 2-speed output for precision low voltage electric drivers. Delivers over 30 VDC on high setting - extra when needed. Standard clutch signal output can be used with counters or programmable logic controller to monitor driver. Circuit breaker protected. Can be used with either 110 or 220 VAC input via external switch.
No. 106SC055 .....$176.00

For CL, SS, TL, BL and A Series

PS-110 Dual Tool Power Source

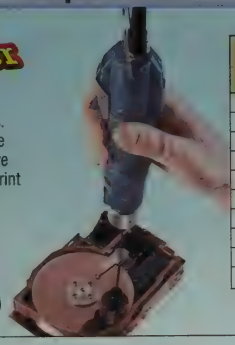
Operates two drivers individually or simultaneously, making it ideal for workstations with varied torque requirements. Includes a switchable 2-speed output rated 30 VDC.
No. 106SC5702 .....$300.00

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.
We reserve the right to correct misprints.

Shock-Absorbing SS Series Drivers

Best Seller

In addition to all the benefits of the CL tools, the SS-series provide extra shock absorbing features. The SS-series will be your tool of choice for value adding screwdriver work on such impact-sensitive equipment as hard disks, LCDs or high density print boards. For a long time, it was difficult to control vibration and minute impacts generated during screw fastening, but SS-series are a new type of electric screwdriver that reduces impacts by approximately 80% when fastening.



SS-6500

TT No.	Model	Torque	Approx. RPM @ 30VDC	Drive Size	PRICE
106SC285	SS-3000	.26-1.74 lbf/in	1000	4.0 mm	$678.60
106SC287	SS-4000	.9-4.0 lbf/in	1000	1/4" hex	$610.75
106SC286	SS-4000	.9-4.0 lbf/in	1000	4.0 mm	$610.75
106SC134	SS-6500	2.2-11.0 lbf/in	900	1/4" hex	$710.25
106SC136	SS-7000	2.6-17.5 lbf/in	750	1/4" hex	$764.65
106SC277	SS-3000-ESD	.26-1.74 lbf/in	1000	4.0 mm	$896.15
106SC278	SS-4000-ESD	.9-4.0 lbf/in	1000	1/4" hex	$896.15
106SC279	SS-4000-ESD	.9-4.0 lbf/in	1000	4.0 mm	$896.15
106SC288	SS-6500-ESD	2.2-11.0 lbf/in	900	1/4" hex	$923.40
106SC289	SS-7000-ESD	2.6-17.5 lbf/in	750	1/4"hex	$976.05

Plug-In VZ Series Precision Torque Drivers

Plug directly into 110VAC outlet. Built-in AC to DC converter. Has new ergonomic design to minimize operator fatigue. Automatically stops motor rotation once pre-set torque is reached.

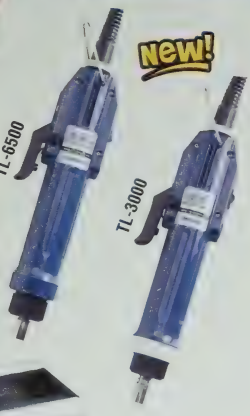
TT No.	Model	Torque	RPM	Drive Size	PRICE
106SC222	VZ-1820	3.5-16 lbf/in.	2000	1/4" hex	$817.10
106SC324	VZ-3012	8-26 lbf/in.	1200	1/4" hex	$817.10
106SC351	VZ-1820-PS	3.5-16 lbf/in.	2000	1/4" hex	$817.10
106SC225	VZ-3012-PS	8-26 lbf/in.	1200	1/4" hex	$817.10

VZ-1820, VZ-3012

TL-Series Precision Torque DC Drivers

Exceptionally lightweight, ergonomically balanced ergonomically. Reduced noise and vibration. Low voltage DC operation. Double insulated. Use with PS-55 power source. Includes two torque springs.

TT No	Model	Torque	Drive Size	RPM on High	RPM on Low	PRICE
106SC5605	TL-6500	1.5-17lbf/in	1/4" Hex	700	500	$488.00
106SC5606	TL-6500ESD	1.5-17lbf/in	1/4" Hex	700	500	$528.00
106SC5601	TL-3000	.25-4.0lbf/in	1/4" Hex	1000	700	$418.00
106SC5602	TL-3000	.25-4.0lbf/in	4mm	1000	700	$418.00
106SC5603	TL-3000ESD	.25-4.0lbf/in	1.4" Hex	1000	700	$458.00
106SC5604	TL-3000ESD	.25-4.0lbf/in	4mm	1000	700	$458.00



New!

TL-6500

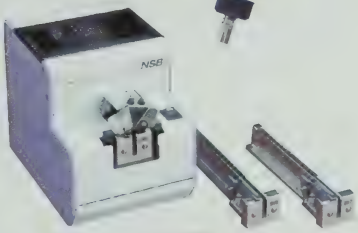
TL-3000

Screw Feeders

NSB Precision Screw Feeders

Flexible screw feeder uses interchangeable rails to handle a variety of fastener sizes and types including washers. Pick-up rate of two per second.

TT No.	ASG No.	Screw Size Inch	Screw Size mm	Max Screw Diameter Inches	Max Length Inches	PRICE	Rail TT No.	Rail ASG No.	PRICE
106SC7240	NSB-10	#000	1.0mm	0.0433	0.7874	$829.45	106SC1010	SR 10	$103.00
106SC7241	NSB-12	#00	1.2mm	0.0472	0.7874	$829.45	106SC1212	SR 12	$103.00
106SC7242	NSB-14	#0	1.4mm	0.057	0.7874	$829.45	106SC1414	SR 14	$103.00
106SC7243	NSB-17	N/A	1.7mm	0.0709	0.7874	$853.33	106SC1717	SR 17	$103.00
106SC7244	NSB-20	#1	2.0mm	0.0866	0.7874	$829.45	106SC2020	SR 20	$103.00
106SC7245	NSB-23	#2	2.3mm	0.0984	0.7874	$853.33	106SC2323	SR 23	$103.00
106SC7246	NSB-26	#3	2.6mm	0.1102	0.7874	$853.33	106SC2626	SR 26	$103.00
106SC7247	NSB-30	#4	3.0mm	0.1259	0.7874	$853.33	106SC3030	SR 30	$103.00



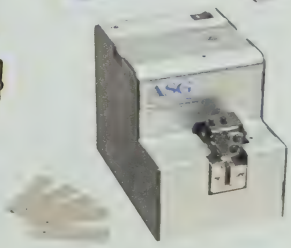
ASG Products for Assembly

With adjustable rail system #000-#10

ASP-60 Precision Screw Feeder

New!

Manually adjustable rail can accommodate up to 11 different sized screws in the same body: 1.0 mm, 1.2 mm, 1.4 mm, 1.7 mm, 2.0 mm, 2.3 mm, 2.6 mm, 3.0 mm, 3.5 mm, 4.0 mm & 5.0 mm (Sizes #000 - #10). Easy adjustment of vibration time, amplitude and operation shut-off delay. Smoother in vacuum pick-up applications. Adjustable bit guide allows use of standard diameter bits. Universal AC adaptor works on 100-240 VAC. Adjusting tool, gages and shims conveniently held in lid. **Specs:** Maximum screw length: .748"; Screw feeding speed: 2 screws per second; Size: 7" x 5" x 6". 100-240 V to 15 VDC.
No. 106SC7430 .....$950.00



ASG Products for Assembly

Stop Automatically When Torque is Reached!

Torq2™ Pneumatic Drivers

New!

Patented clutch design stops tool when designated torque is achieved. Anti-tamper torque cover is standard; can be set to allow operator to modify torques if desired. Quick change collet - operator needs no tools to change bits. Unique ergonomic design provides both operator comfort an extra gripping power; sculpted thermoplastic elastomer housing delivers non-fatigue, balanced performance. Standard drive is 1/4" hex. RPM and torque specifications based upon having air at pressure of 85 psi at the tool.

A. Push-to-Start

TT No.	Model	RPM Free Speed	Toque (lbf.in)	Length (in)	Dia. (in)	Air Inlet	Min Hose I.D. (in)	Air Consumption	PRICE
106SC8201	HP20	1000	.86-6.9	7	1-1/4	1/4" NPTF	3/16	7 CFM	$495.00
106SC8204	HP40	1000	4.3-26	7	1-1/4	1/4" NPTF	3/16	9.9 CFM	$495.00
106SC8208	HP55	1000	6-56	8-1/2	1-1/2	1/4" NPTF	5/16	20 CFM	$522.00
106SC8210	HP65	300	26-156	8-1/2	1-1/2	1/4" NPTF	5/16	21 CFM	$579.00

A. 106SC8201

B. Lever Start

TT No.	Model	RPM Free Speed	Toque (lbf.in)	Length (in)	Dia. (in)	Air Inlet	Min Hose I.D. (in)	Air Consumption	PRICE
106SC8241	HL20	1000	.86-6.9	8-1/4	1-1/4	1/4" NPTF	3/16	7 CFM	$516.00
106SC8244	HL40	1000	4.3-26	8-1/4	1-1/4	1/4" NPTF	3/16	9.9 CFM	$516.00
106SC8248	HL55	1000	6-56	9-3/4	1-1/2	1/4" NPTF	5/16	20 CFM	$531.00
106SC8250	HL65	300	26-156	9-3/4	1-1/2	1/4" NPTF	5/16	21 CFM	$531.00

B. 106SC8241

C. Right Angle

TT No.	Model	RPM Free Speed	Toque (lbf.in)	Length (in)	Dia. (in)	Air Inlet	Min Hose I.D. (in)	Air Consumption	PRICE
106SC8263	HA35	2200	2.6-17	10-3/4	1-1/4	1/4" NPTF	3/16	9.9 CFM	$687.00
106SC8266	HA48	1800	4.3-39	13-1/4	1-1/2	1/4" NPTF	1/4	20 CFM	$765.00
106SC8269	HA60	550	13-82	13-1/4	1-1/2	1/4" NPTF	5/16	20 CFM	$774.00
106SC8270	HA65	300	26-156	13-1/4	1-1/2	1/4" NPTF	5/16	21 CFM	$831.00

C. 106SC8263

D. Pistol Grip

TT No.	Model	RPM Free Speed	Toque (lbf.in)	Length (in)	Dia. (in)	Air Inlet	Min Hose I.D. (in)	Air Consumption	PRICE
106SC8301	HBP38	1800	2.6-21	7	1-3/8	1/4" NPTF	3/16	9.9 CFM	$558.00
106SC8303	HBP47	550	8.7-43	7	1-3/8	1/4" NPTF	3/16	9.9 CFM	$558.00
106SC8306	HBP55	1000	10.5-65	8-1/4	1-1/2	1/4" NPTF	5/16	20 CFM	$558.00
106SC8308	HBP65	300	26-156	8-1/4	1-1/2	1/4" NPTF	5/16	20 CFM	$600.00

Torque Covers for HBP65

No. 106SC8431 Blue $19.46
No. 106SC8432 Gold $19.46
No. 106SC8433 Red $19.46
No. 106SC8434 Silver $19.46
No. 106SC9650 Black.....$19.46

D. 106SC8301

E. Cushion Grip (Non Auto Shut Off)

TT No.	Model	RPM Free Speed	Toque (lbf.in)	Length (in)	Dia. (in)	Min Hose I.D. (in)	Air Consumption	PRICE
106SC8340	HCP39	1600	4.5-35.5	5.25	1-3/8	3/16	10 CFM	$270.00
106SC8342	HCP48	1700	9.53	6.5	1-1/2	5/16	19 CFM	$270.00
106SC8343	HCP58	750	9-80	6.5	1-1/2	5/16	19 CFM	$284.00

E. Positive Clutch (Non Auto Shut Off)

TT No.	Model	RPM Free Speed	Toque (lbf.in)	Length (in)	Dia. (in)	Min Hose I.D. (in)	Air Consumption	PRICE
106SC8360	HPS39	1600	22-44	5.5	1-3/8	3/16	10 CFM	$234.50
106SC8362	HPS48	1700	31-61	6.75	1-1/2	5/16	19 CFM	$234.50
106SC8363	HPS58	750	58-115	6.75	1-1/2	5/16	19 CFM	$234.50

E. Direct Drive (Non Auto Shut Off)

TT No.	Model	RPM Free Speed	Toque (lbf.in)	Length (in)	Dia. (in)	Min Hose I.D. (in)	Air Consumption	PRICE
106SC8370	HDP39	1600	22-44	5.25	1-3/8	3/16	10 CFM	$192.50
106SC8372	HDP48	1700	31-61	6.5	1-1/2	5/16	19 CFM	$203.00
106SC8373	HDP58	750	58-115	6.5	1-1/2	5/16	19 CFM	$203.00

DTT Series Digital Torque Tester

Advanced features with rock solid construction. Portable and easy-to-use. Stores 200 readings in memory with time/date stamp. Simple output/download of data. Has 9 user-selectable torque units for flexibility. Peak, first peak, and track measurement modes are user-selectable. Includes: software and cables to output to a PC.

DTT-10; Range: 0.050 - 10 lbf.in
No. 106IE601.....$2,155.15

DTT-100; Range: 0.500 - 100.0 lbf.in
No. 106IE604 .....$2,155.15

DTT-200; Range: 1.000 - 200.0 lbf.in
No. 106IE605 .....$2,425.14

DTT-500; Range: 2.500 - 500.0 lbf.in
No. 106IE606 .....$2,245.50

ASG Products for Assembly

New!

GEN-II Pneu-Aira Process Monitors

Error proofing system for pneumatic assembly tools. Use with AGS HPQ series drivers. Easy-to-setup and use. Works with ASG auto shut-off screwdrivers, nutrunners and pulse tools. **Features:** Easy set up and use; Learns and monitors the entire assembly process; Identifies errors when they occur for immediate correction; Eight programmable parameters; Includes automatic sequencing from parameter to parameter; Compatible with PLC's and other line control devices; Data storage; Password/Keylock Protected. Includes software.

TT No.	For use with pneumatic driver Model	Torque (lbf.in)	RPM - Free Speed	Air Consumption (CFM)	PRICE
106IE6591	HPQ20	.86 - 6.9	1000	7	$2,424.50
106IE6597	HPQ30	2.6 - 14	1800	9.9	$2,424.50
106IE6592	HPQ35	2.6 - 17	2200	9.9	$2,424.50
106IE6593	HPQ40	4.3 - 26	1000	9.9	$2,424.50
106IE6594	HPQ55	6 - 56	1000	20	$2,451.50
106IE6595	HPQ65	26 - 156	300	21	$2,508.50
106IE6596	HPQ68	44 - 260	280	21	$2,592.50

ASG Products for Assembly

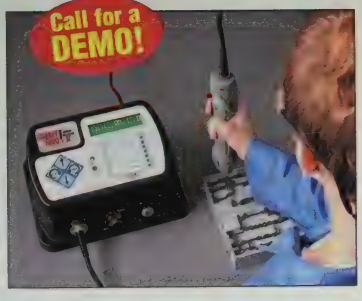
By monitoring the event versus controlling only torque, the SmartTorq II catches problems during the process!

New!

SmartTorq II Error Proofer

Error-proofing device for controlling and monitoring the insertion and tightening of threaded fasteners. Controls torque of each fastener in an assembly and monitors the entire assembly process. Also verifies, cross-threaded fasteners, stripped threads, missing components, extra components added by assembler, bad threads, improper hole or thread size, correct number of fasteners. Allows an assembler using a single screwdriver to have up to eight different torque and fastener applications with the push of a button.

TT No.	Model	For use with	Torque Range	PRICE
106IE6525	System 2000	Supplied with modified 1000 RPM BL-2000 driver	2 to 27 ozf/in	$4,132.49
106IE6526	Controller	ASG-modified BL series electric drivers	--	$3,350.00
106IE6527	System 5000	Supplied with modified 1000 RPM BL-5000 driver	2 to 10 lbf/in	$4,180.38
106IE6528	System 7000	Supplied with modified 1050 RPM BL-7000 driver	5 to 21 lbf/in	$4,259.84
106IE6529	System 7000HT	Supplied with modified 740 RPM BL-7000HT driver	5 to 30 lbf/in	$4,269.81



ASG Products for Assembly

Torque Accessories

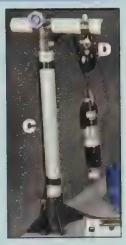
A. Assembly Torque Arms

Easily mounts or clamps to bench-top. Absorbs torque, reduces potential arm, wrist or hand injury, allows easy movement. Lightweight with durable heavy-duty springs. Height adjustable. **Specs:** Max torque reaction: 100lbf. in.; Max tool weight: 10 lbs.; Linkage type: Parallel; Stand height: 30".

24" Max Arc
No. 106SC5050 ..$550.00

18" Max Arc
No. 106SC5046 ..$605.00

30" Max Arc
No. 106SC5054 ..$605.00



B. Tool Spring Balancer and Positioner

Keeps your torque driver at the proper height and out of the way when not in use. Retracts completely or partially to suit operator. Choose from 1-3 lbs. capacity or 3-6 lbs. capacity. 55" cord length.

No. 106SC4021 1-3 lbs. cap. .....$32.00 **No. 106SC4022** 3-6 lbs. cap. $32.00

Tool Stand and Tool Positioner

Add the tool positioner to this three-foot tall stand to keep your torque driver out of your way when not in use. The stand's two-foot arm and positioner's 55-inch cord allows you freedom of movement while you work, plus keeps the tool at whatever level or position you leave it.

C. Tool Stand – Max capacity: 15 lbs.
No. 106SC003 .....$144.60

D. Tool Positioner – Max capacity: 5 lbs.
No. 106SC313 .....$29.70

Tool Mount Couplings

For use with lever start A, CL, SS, BL-3000 & BL5000 Series
No. 106SC5042.....$12.60

For use with BL-7000 Series
No. 106SC5047.....$63.00

For use with VZ Series
No. 106SC5043.....$63.00

Filter Regulator Lubricator

1/4 NP" Port Size, 20u Filter Element, 7-213 psi Adjustable Range, 38 CFM Max flow
No. 106SC8410.....$42.00

Hose Reel/Balancer

3.3 lbs. Capacity, 1/4" NPT Fittings, 6.5' L, 3/8" Hose I.D. 5/16" Hose O.D., 100 psi Working Pressure
No. 106SC8412....$75.00

Quick Disconnect Fittings - PT 1/4"

Coupler (Male PT), 1/4"
No. 106SC8402 .....$5.50

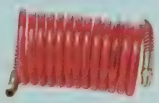
Coupler (Female PT), 1/4"
No. 106SC8400 .....$5.50

Nipple "H" (Male PT), 3/8"
No. 106SC8406 .....$1.50

Nipple (Female PT), 3/8"
No. 106SC8404 .....$1.00

Coil Hose

12' L, 5/16" I.D., 3/8" O.D., 1/4" NPT Fittings
No. 106SC8408 ....$12.00



Tool Holder/Holster

Attach to edge of bench or workstation. Adjusts to hold tool at proper angle. Removable insert allows holder to be adjusted to fit two different diameter tools. Hold for large tool has 1.73" diameter at top and is tapered to 1.53" at bottom. Hole for small tools is 1.45" at top and 0.98" at bottom. Hole depth is 2.36" for both.
No. 106SC8414 .....$25.00

AIMCO

A. Electra Series Electric Screwdrivers

Control torque precisely with automatic shut-off clutches in both push-to-start and lever-start styles. Time savers include external brush replacement and torque adjustment. Advanced motor design ensures comfortable grip temperature and extends motor life. (Taiwan)

B. Electra Low ESD Series Electric Screwdrivers

Both push-to-start and lever-start ESD-safe screwdrivers feature grounded bits and carbonized housing. Casing and buttons are constructed of long-life carbonized plastic, superior to coatings or paints.

C. Slip Clutch Electric Screwdriver

Delivers high-speed performance for quick, consistent assembly and disassembly. Slip clutch and high speed motor provide low torque reaction and one of the best power-to-weight ratios in the industry. Additional features: LED notification when brush change is needed; direct 110V plug-in; 1/4" hex quick change chuck; external torque collar for easy torque adjustment.

Power Supplies for Electric Screwdrivers

Compatible Screwdrivers: AE-4510, AE-4520, AE-4510ESD; Single RPM. Dims: 5" x 2.6" x 1.6"
No. 125SC024 .....**$255.50**

Compatible Screwdrivers: AE-4510, AE-4510ESD, AE-4520ESD; Dual RPM. Dims: 7.8" x 4.6" x 3.7"
No. 125SC2045 .....**$345.50**

JUST THE FACTS

	Model No.	Fastening Torque	Speed – No Load rpm	Weight	Length	Bit-Shank	Power Source	TT No.	PRICE
A.	AE-5681	3-17 in.-lb.	1000 rpm	1.2 lb.	9.3"	1/4"	115V AC Push-to-start	125SC5681	$726.50
	AE-4520	1.3-8.2 in.-lb.	720 rpm	0.68 lb.	8"	1/4"	35V DC Lever-start	125SC4520	$413.50
B.	AE-5681 ESD	3-17 in.-lb.	1000 rpm	1.2 lb.	9.3"	1/4"	Hex 115V AC Push-to-start	125SC5681ESD	$844.75
	AE-4520 ESD	1.3-8.2 in.-lb.	720 rpm	0.68 lb.	8"	1/4"	Hex 35V DC Lever-start	125SC4521	$543.50
C.	AE-2015	2-15 in.-lb.	1000 rpm	1.2 lb.	9.2"	1/4"	110V/120V AC	125SC2015	$360.50

Manual Screwdrivers

LINDSTROM

Micro-Adjustable Torque Driver

(1/4" Hex Drive)

The precise pull-to-adjust, push-to-lock adjustment knob and easy-to-read window scale make this micro-adjustable torque driver like no other. This 1/4" Hex driver has a spring-loaded, high-security bit holder, which uses all standard drive bits. It has a cam-over torque limiting clutch for repeatability and accuracy with torque accuracy of ±6%. Certificate of accuracy traceable to NIST supplied with each driver. You can easily identify tools set at different torque values with colored end caps, sold separately. **(USA)**

No. 844SC5001 20-100 in./ozs. **$181.50**
No. 844SC5002 3-15 in./lbs. **$181.50**
No. 844SC5003 5-40 in./lbs. **$199.50**

New!

LINDSTROM

Pre-Set Manual Torque Drivers

(1/4" Hex Drive)

Rugged and precise driver for multiple production uses. Stainless steel 1/4" Hex receiver for all standard drive bits. Non-magnetic spring-loaded bit holder. Precise 1/8" Hex adjustment screw makes setting torque easy. Hex key included with each driver. Cam-over torque limiting clutch. Lightweight yet rugged construction. Comfortable shape and non-slip grip. Permanently lubricated internal mechanism.

No. 844SC5011 6-32 in./ozs. **$112.50**
No. 844SC5012 10-100 in./ozs. **$131.50**
No. 844SC5013 1.5-15 in./lbs. **$131.50**
No. 844SC055 4-40 in./lbs. **$143.50**

ASG Products for Assembly

New!

Micro-Adjustable Torque Driver

(1/4" Hex Drive)

Ideal for application that require more than one torque value. Easy-to-read window scale. Lightweight and easy-to-use. Dial torque values. Factory calibrated.

No. 106SC101 20-100 ozf./in. **$179.15**
No. 106SC102 3-15 lbf./in. **$179.15**
No. 106SC5103 5-40 lbf./in. **$199.50**

ASG Products for Assembly

Pre-Set Manual Torque Drivers

(1/4" Hex Drive)

Meets or exceeds the accuracy and repeatability requirements of ISO 6789 and ASME-B107M. When torque applied exceeds limits, cam-over torque clutch stops driver. Advanced ergonomically designed aluminum body.

No. 106SC098 6-32 ozf/in.....**$126.70**
No. 106SC099 10-100 ozf/in.....**$135.60**
No. 106SC103 1.5-15 lbf/in. **$135.60**
No. 106SC104 4-40 lbf/in. **$156.05**

Please specify torque setting when ordering.

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.
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Best Seller

Utica Torque Limiting Screwdrivers - Adjustable Models

Easy-release of bit holder securely retains 1/4 female hex drive bits during operation. Patented, spring-loaded locking collar locks the scale at the desired torque setting. Unique roller bearing cam produces smooth, consistent performance when tightening. Cam mechanism automatically slips to prevent over-tightening. Aluminum housing reduces weight and maximizes durability. Calibrated to ASME B107.14M for right hand only using test equipment traceable to NIST. ISO9001 certified.

- Standard product calibrated right hand only. Left hand calibration on request.
- Choice of adjustable models with precision micrometer scale or factory preset models.
- U.S. Standard or metric scales
- Precision micrometer scale (adjustable models) calibrated in inch-ounces or inch-pounds.
- Metric models: cm-kg.
- Easy-release bit holders securely retain bits during operation while permitting easy removal.
- Anti-backlash design for repeatability.
- Meets or exceeds ASME B107.14M and ISO 6789 specifications.
- Adjustable model accuracy is ±6% of setting, starting at 20% of full scale to full scale. Right hand only.

TT No.	Model	Range	Collar Color	Increments	Hex Drive	Weight (lbs)	PRICE
826SC012	TS100	20-100 in.-oz.	Black	2 in.-oz.	1/4 Female	.50	$230.00
826T0164	TS30	6-30 in.-lb.	Red	1 in.-lb.	1/4 Female	.50	$230.00
826T0166	TS35	6-36 in.-lb.	Blue	1 in.-lb.	1/4 Female	.50	$230.00

Adjustable Torque Screwdriver Kit - 43 pc - 20 in.-oz. to 30 in.-lb.

Comes with both the TS-30 and TS-100 adj. torque limiting screwdrivers and a multitude of useful accessories — all in a hard plastic case with a insert. **Includes:** Torque screwdriver bld.: .080; (2) .100; Hex socket: 3/32"; (2) 7/64"; Hex keys: .028; (2) .035; Screwdriver hex bits: (2) .050; (2) 1/16"; (2) 5/64"; 3/32"; 1/8"; 5/32"; Screwdriver bld. torque screws: (2) SZ. 2, 3;; (2) SZ. 4, 5; SZ. 5, 6; SZ. 6, 8; Phillips bld. torque screw: (2) SZ. 0, 1; (2) SZ. 2, 3, 4; SZ. 4, 6, 7, 8, 10; (2) Adapter 1/4" drive; (2) Bit holder mini. Torque; 1/4" Dr. reg. sockets: 1/8"; 5/32"; (2) 3/16"; 1/4"; 5/16". (KT-130)

No. 826T0118.....**$810.00**

Torque Limiting Screwdriver Kit - 24 pc. - 6-30 in.-lb.

Includes: TS-30 Adj. Torque Screwdriver – 1/4" fm. hex with 6 to 20 in-lb. range, Torque screwdriver blade: .10, Hex socket 7/64", Hex key .035, Screwdriver hex bit: .050, 1/16", 5/64", 3/32", 1/8", 5/32", Screwdriver blade torque screw: SZ 2,3; 4,5; 5,6; 6,8, Phillips blade torque screw: #0, #1, #2, #3, #4, Adapter 1/4" drive, Bit holder mini torque, 1/4" dr. reg. socket: 1/8", 3/16", 1/4", 5/16", Plastic case and insert. (KT-30)

No. 155SC0300 ..... **$464.00**

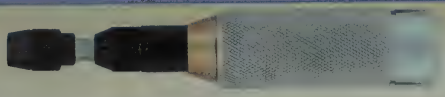
Adjustable Torque Screwdriver Kit - 20 pc. - 20-100 in.-oz.

New!

Includes TS-100 adjustable torque limiting screwdriver and accessories in a hard plastic case with insert. Includes: Torque screwdriver bld: .000, .100; Hex sockets: 3/32",;7/64"; Hex keys: .028, .035; Screwdriver Hex bits: .050, 1/16", 5/64"; Screwdriver bld torque screw SZ, 2,3; SZ4, 5; Phillips bld. torque screw SZ 0, 1; SZ 2, 3, 4; Adapter 1/4" drive; Bit holder mini torque; 1/4" Drive reg socket 1/8"; 1/4 Drive reg socket 3/16".(KT-100)

No. 155SC102.....**$438.00**

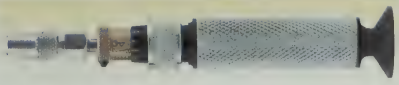
Preset Models



Designed for highly repetitive assembly line operations. Calibrated according to ASME B107.14M using test equipment traceable to NIST. ±4% accuracy for right hand only. ISO9001 certified. Available factory preset or customer can set themselves using torque analyzer. Please specify torque setting when ordering factory preset models (FPM).

TT No.	Model	Range in.-oz.	Range in.-lb.	Range Nm	Range cm-kg	Hex Drive	W/Data Certificate	PRICE
155SC0100	TS-SN-1	20-150	1.5-10	1.1	1.5-12	1/4 Female	No	$180.00
155SC1001	TS-SN-1 (FPM)	20-150	1.5-10	1.1	1.5-12	1/4 Female	No	$180.00
155SC0011	TS-SN-1 (FPM+DC)	20-150	1.5-10	1.1	1.5-12	1/4 Female	Yes	$195.00
155SC0200	TS-SN-2	128-640	8-40	1-4.5	9-45	1/4 Female	No	$180.00
155SC0220	TS-SN-2 (FPM)	128-640	8-40	1.4.5	9-45	1/4 Female	No	$180.00
155SC0202	TS-SN02 (FPM+DC)	128-640	8-40	1-4.5	9-45	1/4 Female		$195.00

Miniature Models



Aluminum housing reduces weight and maximizes durability.

Unique roller bearing cam produces smooth, accurate, and consistent performance when tightening fasteners.

- Specifically designed for reliable tightening of the very smallest threaded fasteners.
- Largest model weighs only 1 oz.
- Operate in same manner as standard models — reach set torque and slip to prevent over-torquing of delicate components.
- Accuracy ±6%, right hand only. Meets or exceeds ASME B107.14M and ISO 6789 specifications.
- Choice of micrometer adjustable or factory preset models.

Adjustable							
TT No.	Model	Range	Increments	Drive	Length (in.)	Weight (lbs)	PRICE
155SC111	TT-1	5-20 in.-oz.	1/4 in.-oz.	Universal	3.625	.06	$371.00

Preset								
TT No.	Model	Range in.-oz.	Range Nm	Range cm-kg	Hex Drive	Length	Weight	PRICE
155SC211	TT-SN-1	5-30	.33-2.0	.33-2	Universal	3.625	.06	$357.00

Miniature Adjustable Torque Limiting Screwdriver Kit 29 pc. - 5-20 in.-oz.

5-20 in-oz range and a complete set of accessories in a hard plastic case. **Includes:** Torque screwdriver bld.: .040; .055; .070; .080; .100, Phillips screwdriver: 0,1; 2,3,4, (2) Bit holder universal torque, Hex sockets: 5/64"; 3/32"; 7/64"; 1/8"; 5/32", Hex keys: .028; .035; .050; 1/16; 5/64, Spline keys: .048 - 4 Flutes; .048 - 6 Flutes; .060 - 6 Flutes; .069 - 6 Flutes; .072 - 6 Flutes; .076 - 4 Flutes; .096 - 6 Flutes. (KTT-1)

No. 155SC1111..... **$576.00**

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Sturtevant Richmont

ISO/IEC 17025 certification!

Exacta® Digital Series Torque Wrenches

Large, high contrast LCD and simple programming keys make Exacta easy-to-use. ±1% indicated value accuracy from 20% to 100% of capacity; Operates in track or peak and measures torque in CW and CCW directions; 999 memory locations for audit and process development uses; Electronics housing rotates 60° to assist view of LCD in confined areas; Uses the Dovetail Head system with 100+ interchangeable heads. **Includes:** Cable and software. Uses 4 AA batteries.

TT No.	Drive Size	Torque Max (Ft. lbs.)	Unit of Measure	Length	PRICE
304IE0330	3/8"	25	in. lbs., ft. lbs., Nm, kgf cm	14-1/4"	$799.00
304IE0331	3/8"	75		16"	$819.00
304IE0332	1/2"	150		16"	$839.00

Sturtevant Richmont

ISO/IEC 17025 certification!

Micrometer Adjustable Fixed Ratchet SDR Series Torque Wrenches

Rotating grip for torque adjustment. Thumbscrew mechanism locks handle to avoid torque value change during use. Ball-bearing rockover assembly assure smooth operation, enhances repeatability, and increases wrench cycle life; Audible and tactile impulse emitted at torque value; Cushioning, oil/chemical resistant grip. Includes case. Accuracy: ±4% of indicated value.

TT No.	Drive Size	Torque Min (in lbs)	Torque Max (in lbs)	Steps of Graduations	Length	PRICE
304IE0749	1/4"	10	50	1 in. lbs.	10-1/8"	$196.00
304IE0750	1/4"	30	150	2 in. lbs.	10-1/8"	$201.00
304IE0751	3/8"	30	150	2 in. lbs.	10-5/8"	$206.00
304IE0761	3/8"	40	200	2 in. lbs.	10-11/16"	$206.00

Sturtevant Richmont

Interchangeable Head Torque Wrenches

Incredible versatility – wrenches accept over 140 interchangeable heads! Unique dovetail design provides strength and rigidity of connection between head and wrench. ±4% I. V. Accuracy meets or exceeds ASME B107.14M and ISO 6789. Minimum capacity is 20% of full capacity for each tool. Ergonomic grips. **(USA)**

Wrenches	TT No.	Part No.	Torque	Graduation	OAL	PRICE
Adjustable	304PR812	810769	10-50 in. lbs.	1 in. lb.	9"	$155.00
Series	304SC0765	810765	30-150 in. lbs.	2 in. lbs.	9"	$166.00

Interchangeable Heads	TT No.	Part No.	Hex Size	Max. Torque (in. lbs.)	Head Length	PRICE
A. Box Heads 12 pt. hex.	304SC063	819063	7/16	650	1-13/16"	$57.00
	304SC065	819065	9/16"	1050	1-29/32"	$60.00
B. Ratchet Heads	304SC504	809504	1/4"	250	1-15/16"	$69.00
	304SC505	809505	3/8"	1250	2-3/16"	$80.00

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Best Seller

Sturtevant Richmont

Torque Screwdriver Inch Kit - 29 pc

Kits includes: one each of the listed bits and a driver at 2-36 in. lbs. Hex: 5/64", 3/32", 7/64", 9/64", 1/8"; Posidrive: #1, #2; Slotted: 0-1, 3-4, 5-6, 8-10, 12-14; Socket Adapter 1/4"; Bit Holder 1/4"; Phillips: #0, #1, #2, #3; Torx: T10, T15, T20, T25, T30, T40; Sq. Recess: 0, 1, 2, 3; Storage Case. NIST Certificate included. **(USA)**

No. 304TO036 Inch Kit.....**$278.00**

Inch Driver Only (2-36 in.lbs.)
No. 304TO034 .....**$218.00**

Metric Driver Only (Adj. to 3-40 kgf. cm)
No. 304PR563 .....**$170.00**

ExacTorq™ 74 Torque Limiting Driver

With the ExacTorq™ a simple twist of the end-mounted DigiLock mechanism sets your torque level in exact, single digit increments. Use in both right and left hand directions. Uses standard bits, sockets, and adapters. *Meets ASME B107.14M.* **Specs:** 20-100 in.ozs.; Graduation: 1 in.oz.; Drive 1/4"F Hex; 6-3/4" OAL. **(USA)**

No. 304SC045 .....**$218.00**

Torque Limiting Screwdriver

Kit contains torque limiting screwdriver with capacity at 20-100 in.ozs. **(USA)**

No. 304TO056.....**$124.00**

FREE NIST-traceable Certificate and case!

Dial Torque Wrench

Combination assembly and auditing tool combines bi-directional versatility with high accuracy. Oversized dial for easy reading, Neoprene grip for comfort. Color-coded dials indicate units of measure, heavy-duty dial guard to protect from breakage. *Meets ASME B107.14M & ISO 6789.* **(USA)**

0-50 in.lbs. cap., 1/4" Sq. Dr., ±3%, 1 in.lb. grad
No. 304SC719 .....**$250.00**

0-150 in.lbs. cap., 3/8" Sq. Dr., ±3%, 2 in.lb. grad
No. 304SC701 .....**$250.00**

Sturtevant Richmont

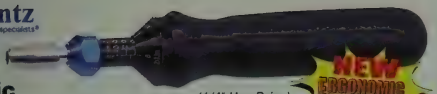
Torq-Tronics® Calibrated Digital Testers

ISO/IEC 17025 certification!

Features: ±1% indicated value accuracy from 10% to 100% of rated capacity; Bi-directional; 3/8" high, 16-character, backlit LCD screen; Keypad selectable English, Metric and S.I. units; Communications: RS232C Serial Port, 9-pin, Baud Rate 4800, Stop Bits 1, Parity None; Uses rundown fixture for power tool testing. 11" OAL.

TT No.	Drive Size (Male Hex)	Torque Range	PRICE
304IE0391	1/4"	1-10 in. lbs ./1.13-11.3 dNm/11.5 kgf cm	$1,725.00
304IE0392	1/4"	5-50 in. lbs./5.65-56-5 dNm/57.6 kgf cm	$1,525.00
304IE0393	3/8"	10-100 in. lbs./1.13011.3 Nm/115.2 kgf cm	$1,525.00

mountz
the torque tool specialists®



Ergonomic Micro-Torque Externally Adjustable Screwdriver

(1/4" Hex Drive)

Eliminates the possibility of over-torqued fasteners. The bi-directional cam "slips-free" once the set torque has been reached. Adjustment knob disengages to prevent accidental adjustment. Meets or exceeds the accuracy and repeatability requirements of ISO 6789: 1992. (Japan) *Metric Models Available.*

1/4 Male Sq. Drive			
TT No.	Range	Grad.	PRICE
584SC448	20-160 ozf.in	1 ozf.in	$342.00
584SC454	10-50 lbf.in	1 lbf.in	$355.00
584SC458	30-80 lbf.in	1 lbf.in	$363.00

1/4 Female Sq. Drive			
TT No.	Range	Grad.	PRICE
584SC442	20-160 ozf.in	1 ozf.in	$342.00
584SC440	2-12 lbf.in	0.1 lbf.in	$342.00
584SC452	10-50 lbf.in	1 lbf.in	$355.00
584SC456	30-80 lbf.in	1 lbf.in	$363.00

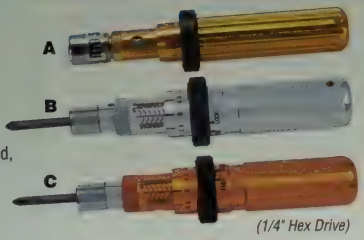
Clean Room

Class 100 Clean Room rated. Special micro-filtered lubricant seals to prevent contamination. Aluminum handles sealed with PTFE impregnated anodization. (Japan)

TT No.	Torque Range	PRICE
584SC320	3 – 32 ozf.in	$370.00
584SC3220	1.4 – 36 lbf.in	$423.00

TOHNICHI

Torque Limiting Driver



(1/4" Hex Drive)

Prevent over-torquing. When set torque is reached, screwdriver mechanism automatically cams-over. Ideal for electronic and computer assembly.
Features: Adj. precision micrometer, U.S. Standard; Adj. precision scale in in-oz, in-lb, cm-kg; Spring-load, locking collar; Easy-release bit holder; Anti-backlash; Accuracy ±3%. Drive: 1/4 F/Hex. (Japan)

Range: 15-50 in-oz.; Increments: 0.25 in-oz.; 3-5/8" OAL.
A. No. 782SC050.....**$150.00**

Range: 2-12 in-lbs.; Increments: 0.05 in-lbs.; 4-9/16" OAL
B. No. 782SC0102.....**$141.00**

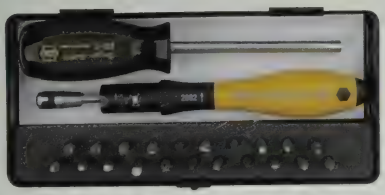
Range: 6-26 in-lbs.; Increments: 0.1 in-lbs.; 5-7/16" OAL
C. No. 782SC026.....**$171.00**

Wiha

TorqueVario-S Tools

Feature an integrated direct reading window scale that eliminates false readings by displaying the torque value.

ESD Safe Adjustable Torque Vario-S Bit Set – 24 pc



Safe for use in ESD work areas. Includes ergonomic multi-component adjustable Torque Vario-S handle, 21 micro bits, micro bit holder and torque adjustment tool in a steel storage box.
Bits include: Slotted: 1.5, 2.0, 3.0, 4.0mm; Phillips: #00, #0, #1; Torx: T6, T7, T8, T9, T10, T15; Hex Inch: .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32". Handle: 7.5-20 Inch lbs.
No. 881SC8592.....**$187.96**

Torque Vario-S Control Set

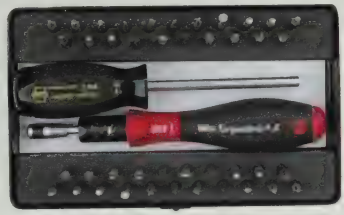
Calibration certified. Features ergonomic multi-component adjustable Torque-Vario-S handles, blades and torque adjustment tool. Includes durable canvas pouch.

Slotted and Phillips Set – 8 pc

Includes: Slotted: 2.5, 3.0, 3.5, 4.0mm; Phillips: #0, #1, Handle: 7.5 – 20 in/lbs.
No. 881SC8596.....**$143.56**

Torque 1/4" Hex Control Set

Includes ergonomic multi-component adjustable Torque-Vario-S handle, Micro-bits, Micro-bit holder and torque adjustment tool. Includes metal case.



Bit Set – 51 pc
Includes: Slotted: 4.5, 5.5, 6.5, 8.0 mm; Phillips: #0, #1, #2, #3; Square: #1, #2, #3; Torx: T6, T7, T8, T9, T10, T15, T20, T25; Hex Inch: 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16; Hex Metric: 1.5, 2.0, 2.5, 3.0, 4.0, 5.0, 6.0, 8.0mm; Triwing: 0, 1, 2, 3, 4; Torq. Set: 4, 5, 6, 8; Pozidrive: 0, 1, 2, 3; Handle: 10-50 In/lbs.
No. 881SC8595 (Shown) **$210.12**

Fully Adjustable – TorqueVario-S Handle

Tested in accordance with EN ISO 6798, BS EN 26789, ASME B107.14M. Ergonomic multi-component handles, light and compact.

With Window Scale

TT No.	Adjustable In.lbs	PRICE
881SC8501	1 - 5	$102.94
881SC8502	5-10	$102.94

TT No.	Adjustable In.lbs	PRICE
881SC8504	7.5-20	$114.58
881SC8506	10-50	$117.84
881SC8508	20-70	$125.46

BONDHUS

Torque Screwdriver Set - 14 pc

5.3-13.3 lb-in torque range with color coded handle. Easy torque adjustment in increments of .9 in-lb. Precise release indicated by audio and visual signal. Blades made from Chrome-Molybendum-Vanadium steel with superior hardness and durability. **Includes:** Slotted: 1/8"; 9/64", Phillips: PH0, Pozidriv: PZ0, Torx®: T6; T7; T8, Torx Plus® IP6; IP7; IP8; IP9, Metal Case.
No. 204SC9116.....**$152.30**

Best Seller

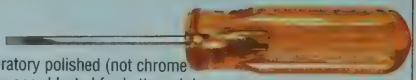
TECHNI-TOOL

Phillips & Slotted Head Kit - 12 pc

This set contains six Slotted Drivers, six Phillips drivers, including pocket and stubby-type screwdrivers. Provides excellent coverage for your screwdriver needs. **Includes:** Phillips: #0 x 2" w/ pocket clip (for recess head screws), #0 x 2", #1 x 3", #1 x 6", #2 x 1-5/16", #2 x 4"; Slotted: 1/8" x 8", 1/4" x 1-1/4", 1/4" x 4", 3/16" x 3", 3/32" x 2" w/pocket clip, 5/16" x 6" all in a reusable pouch. **(USA)**

No. 758SC120 .....**$46.20**

Xcelite



Screwdrivers are vibratory polished (not chrome plated) and the tip is vapor blasted for better grip!

Phillips & Slotted Head Kit - 6 pc

Includes: Philips: #1, #2; Slotted: 1/8" x 4",1/4" x 4", 3/16" x 6", 5/16" x 6" OAL.

No. 272SC790 .....**$33.82**

Round Blade Kit - 5 pc

Includes:1/8" x 2", 5/32" x 4", 3/16" x 6", 1/4" x 4", 5/16" x 6" OAL

No. 272SC776 .....**$24.94**

Individual Screwdrivers

Slotted Screwdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
272SC686	1/8"	2"	4-5/8"	$2.72
272SC690	1/8"	4"	6-5/8"	$3.55
272SC692	1/8"	6"	8-5/8"	$3.81
272SC694	1/8"	8"	10-5/8"	$3.97
272SC684	1/8"	10"	12-5/8"	$4.32
272SC722	5/32"	4"	6-5/8"	$3.17
272SC724	5/32"	5"	7-5/8"	$3.66
272SC698	3/16"	3"	6-5/8"	$4.24
272SC700	3/16"	4"	7-5/8"	$4.59
272SC702	3/16"	6"	9-5/8"	$5.60
272SC704	3/16"	8"	11-5/8"	$6.02
272SC696	3/16"	10"	13-5/8"	$6.94
272SC676	1/4"	4"	8-1/8"	$5.62
272SC678	1/4"	6"	10-1/8"	$6.59
272SC680	1/4"	8"	12-1/8"	$7.17
272SC672	1/4"	10"	14-1/8"	$7.57
272SC714	5/16"	4"	8-1/2"	$7.02
272SC716	5/16"	6"	10-1/2"	$6.94
272SC712	3/8"	8"	12-1/2"	$9.58

Phillips Screwdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
272SC804	0	2"	4-5/8"	$3.17
272SC806	1	3"	6-5/8"	$4.22
272SC818	1	6"	9-5/8"	$5.20
272SC810	2	4"	8-1/8"	$5.65
272SC814	3	6"	10-1/2"	$8.30
Pocket Clip	**Style**			
272SC560	0	2"	4-1/4"	$2.85
Stubby				
272SC792	1	1-7/16"	3-1/4"	$4.96
272SC794	2	1-5/16"	3-3/8"	$5.31
Extra Long				
272SC808	1	10"	13-5/8"	$7.57
272SC812	2	10"	14-1/8"	$8.56

Slotted Pocket Screwdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
272SC706	3/32"	2"	4	$2.18
272SC708	3/32"	3"	5-1/4"	$2.45
272SC710	3/32"	4"	6-1/4"	$2.61
272SC682	1/8"	2"	4-1/4"	$2.11
272SC688	1/8"	3"	5-1/4"	$2.43

Xcelite

Super-Tru Tip - Phillips Type

Features

- Super-tru tip for longer wear life
- Reduction of damage to screw head recesses
- Especially in smaller size fasteners
- Specially treated & finished tips with black oxide for ultimate control

Phillips Screwdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
272SC862	0	2"	4-5/8"	$4.14
272SC864	1	3"	6-5/8"	$5.70
272SC868	2	4"	8-1/8"	$7.31
272SC866	1	10"	13-5/8"	$8.67
272SC870	2	10"	14-1/8"	$9.70

Xcelite

Best Seller

Pro-Series Ergonomic Screwdriver Set - 7 pc

All feature rubber coated dual material handles with an ESD safe hard plastic core to protect sensitive components. Handles are ergonomically designed, allowing sustained high torque with minimal slippage and muscle fatigue. Features chrome molybdenum vanadium steel shafts with black oxide tips. **Includes:** (5) Slotted: 1/8", 5/32", 3/16", 1/4", 5/16"; (2) Phillips: #1, #2. (Germany)

No. 272SC709 .....**$38.42**

Pro-Series Ergonomic Individual Screwdrivers

Slotted Screwdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
272SC0184	1/8"	4"	6-5/8"	$3.97
272SC5324	5/32"	4"	6-3/4"	$3.70
272SC163	3/16"	6"	9-3/4"	$6.27
272SC0144	1/4"	4"	7-7/8"	$6.59

Phillips Screwdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
272SC0101	#1	3"	6-3/4"	$4.98
272SC1020	#2	4"	7-3/4"	$6.66

Note: 5/16" screwdrivers is only available in the kit. Not sold separately.

Xcelite

Mini-Driver Kit - Inch

Contains six jeweler's type slotted and Phillips blades. Sizes: 00 Phillips, .040", .055", .070", .080", .100" in pouch. **(USA)**

No. 272SC550.....**$14.27**

Combination Reversible Screwdriver Kit

Reversible Blades: #1 Phillips-3/16" Slotted, #2 Phillips-1/4" Slotted. Regular Handle: 1-1/8" x 4-1/8". **(USA)**

A. No. 272SC382.....**$16.24**

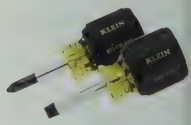
Pocket Roll Kit

Kit contains: Regular Handle: 1-1/8" x 4-1/8". Reversible Blades: #1 Phillips -3/16" Slotted, #2 Phillips-1/4" Slotted, #3 Phillips-5/16" Slotted. **(USA)**

B. No. 272SC386 .....**$22.11**

KLEIN TOOLS

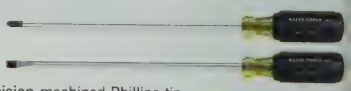
Stubby Screwdriver Set - 2 pc



Double wings inside handle provide solid, twist-resistant blade anchor. **Includes:** 1/4" keystone-tip and #2 Phillips screwdriver.

No. 490SC5071 .....**$13.80**

10" Long Blade Screwdriver Set – 2 pc



For hard-to-reach areas. Precision-machined Phillips tip. Narrow cabinet tip for fitting in tight spaces. **Includes one each:** Phillips round shank, Profilated® No. 2 tip, 14-5/16" OAL; 1/4" cabinet tip, round shank, 14-5/16" OAL.

No. 490SC5072.....**$21.50**

GENERAL

Pro Magnetizer/Demagnetizer

Magnetizes screwdrivers so you lose fewer screws, and completely demagnetizes tools and small parts. (Taiwan)

No. 400IE3601 .....**$3.51**

Crescent

2000 Screwdriver Set - 6 pc

Alloy steel is incorporated into the round blade, which extends tip life. Tapered, torque-enhancing cushion grip handle interlocks with the durable core to provide a more powerful and comfortable grip. **Contains:** Phillips No. 1 & 2; Slotted 3/16" x 4", 5/16" x 6", 1/4" x 4", 3/16" x 4" Sq. **(USA)**

No. 272SC076 .....**$42.34**

Series 2000 Individual Screwdrivers

Slotted Screwdrivers				
TT No.	Tip Size	Blade Length	OAL	PRICE
272SC060	3/16	4"	7-1/4"	$5.07
272SC434	1/4	4"	8-3/8"	$6.10
272SC058	5/16	6"	11"	$6.62
272SC1438	3/8	8"	13-1/2"	$8.38

Phillips Screwdrivers				
TT No.	Tip Size	Blade Length	OAL	PRICE
272SC072	#1	3"	6-3/4"	$4.48
272SC074	#2	4"	8-3/4"	$3.81
272SC066	#3	6"	11"	$5.92
272SC073	#4	8"	13-1/2"	$8.43

Dura-Driver General Purpose Screwdriver Set - 10 pc

Features: Ergonomic high torque handle; Cushioned rubber cover for comfort and slippage control; Tool steel shafts for strength and durability; Bright zinc plated blade to prevent corrosion. **Includes:** Phillips: #1 x 4", #2 x 4", #2 x 1-1/4" Stubby, #0 x 2" w/pocket clip; Mechanic's Round Slotted: 1/4" x 4", 1/4" x 6", 1/4" x 1-1/4" Stubby; Electrician's Round: 3/16" x 3", 3/16" x 6"; 1/8" x 2" Instrument Pocket Clip.

No. 272SC0010.....**$19.66**

Dura-Driver Individual Screwdrivers

Slotted Screwdrivers				
TT No.	Tip Size	Blade Length	OAL	PRICE
272SC331	3/16	3"	7-14"	$2.29
272SC447	1/4	4"	8-7/8"	$2.56
272SC460	1/4	6"	10-3/4"	$3.02
272SC058	5/16	6"	11-1/8"	$6.62

Phillips Screwdrivers				
TT No.	Tip Size	Blade Length	OAL	PRICE
272SC0034	#1	4"	8-1/8"	$2.38
272SC044	#2	4"	8-7/8"	$2.85
272SC046	#2	6"	10-1/4"	$3.39
272SC0560	#3	6"	10-1/4"	$4.22

Crescent

Professional Pocket Screwdrivers w/Clip

Features chrome plated steel shafts for maximum corrosion resistance. Precision ground tip for reduced cam-out. **(USA)**

Phillips Pro. Pocket w/Pocket Clip				
TT No.	Tip Size	Blade Length	OAL	Price
272SC117	#1	2"	4-1/4"	$2.29
Slotted Pro. Pocket w/Pocket Clip				
272SC119	1/8"	2"	4-1/4"	$1.58

Great for working in confined spaces!

Offset Screwdrivers

Blade is made of hardened, chrome-plated, CVM special steel. Handle is constructed of impact resistant, high-quality plastic. (Germany)

No. 881SC6112 Phillips: #1, #2 tips; 4.9" OAL.....**$4.92**

No. 881SC0790 5pc. Set (Shown) **$42.50**

Heavy-Duty Screwdriver Set - 8 pc

Includes: (5) Slotted: 5.5, 6.5, 7, 8, 10; (3) Phillips: #1, #2, #3. (Germany)

No. 881SC308 .....**$92.20**

Slotted Screwdrivers				
TT No.	Tip Size	Blade Length	OAL	PRICE
881SC0815	5.5	3.9"	8.4"	$9.64
881SC0816	6.5	3.9"	8.4"	$10.42
881SC0820	7.0	5"	9.4"	$10.42
881SC0825	8.0	5.9"	10.7"	$11.42

Phillips Screwdrivers				
TT No.	Tip Size	Blade Length	OAL	PRICE
881SC201	#1	3.1"	7.3"	$7.48
204SC213	#2	3.9"	8.4"	$10.20
881SC203	#3	5.9"	10.7"	$14.34

C.K

SensoPlus® Screwdriver Sets

Dual-Compound handle with integrated soft grip inserts. Blades made from hardened high alloy steels, with chromed black tips. (Germany)

Slotted and Phillips Screwdriver Set - 7 pc

Best Sellers

Includes: (4) Slotted: 3", 4", 5.5", 6.5"; (3) Phillips: #0, #1, #2. (Germany)

No. 217PL062.....**$53.15**

Slotted and Phillips Screwdriver Set - 5 pc

Includes: (3) Slotted: 4", 5.5", 6.5"; (2) Phillips: #1, #2. (Germany)

No. 217PL052 .....**$42.68**

Slotted Screwdrivers				
TT No.	Tip Size	Blade Length	OAL	PRICE
217SC104	5/32"	3"	6-5/8"	$5.81
217SC105	7/32"	4"	8-1/8"	$6.43
217SC106	1/4"	5"	9-1/8"	$7.89
217SC165	1/4"	6"	10-1/8"	$8.46
217SC108	5/16"	7"	11-3/4"	$10.53
217SC200	25/64"	8"	12-3/4"	$10.99

Phillips Screwdrivers				
TT No.	Tip Size	Blade Length	OAL	PRICE
217SC260	0	2-3/8"	5-3/4"	$5.46
217SC280	1	3-1/8"	6-3/4"	$6.58
217SC210	2	4"	8-1/8"	$6.82

Pozidriv Screwdrivers				
TT No.	Tip Size	Blade Length	OAL	PRICE
217SC060	PZD 0	2-3/8"	5-3/4"	$5.81
217SC180	PZD 1	3-1/8"	6-3/4	$6.88
217SC100	PZD 2	4"	8-1/8"	$8.10

Sensoplus® Long Reach Screwdriver Set – 5 pc

Phillips: #1 x 300mm, #2 x 300mm; Slotted: 3 x 250mm; Torx®: TX10 x 300mm; TX15 x 300mm.

No. 217SC4964.....**$45.05**

Phillips Screwdrivers				
TT No.	Tip Size	Blade Length	OAL	PRICE
217SC1300	#1	12"	15-5/8"	$8.74
217SC4907	#2	12"	16-1/8	$10.08

Slotted Screwdrivers				
TT No.	Tip Size	Blade Length	OAL	PRICE
217SC4925	1/8"	10"	13-5/8"	$7.89

Torx Screwdrivers				
TT No.	Tip Size	Blade Length	OAL	PRICE
217SC9017	T10	12"	15-5/8"	$9.58
217SC9018	T15	12"	15-5/8"	$10.53

C.K

ESD Screwdriver Sets - 6 pc

Set comes with slotted and PZD/SDV screwdrivers **Includes:** 75 x 3mm (3" x 1/8") slotted; 100 x 3mm (4" x 1/8") slotted; 125 x 5mm (5" x 3/16") slotted; Pozidrive: P20, P21, PH22. (Germany)

No. 217SC471 .....**$28.81**

Set comes with slotted and Phillips screwdrivers **Includes:** 75 x 3mm (3" x 1/8") slotted; 100 x 3mm (4" x 1/8") slotted; 125 x 5mm (5" x 3/16") slotted; Phillips #0, #1 and #2. (Germany)

No. 217SC4743 .....**$25.90**

C.K

ESD Torx® Tamperproof Screwdriver Set - 5 pc

Includes: TX08, TX09, TX10,TX15 and TX20 tamperproof Torx. (Germany)

No. 217SC4744 .....**$41.84**

ESD Long Reach Screwdriver Set – 6 pc

Get to those hard-to-reach areas with this set of six extra long Triton ESD screwdrivers. **Includes:** Phillips: #1 x 300mm (12") blade length, #2 x 300mm (12") blade length; Slotted: 5mm (.1968") blade width x 250mm (9.85") blade length; Torx®: TX8 x 200mm (8") blade length, TX10 x 300mm (12") blade length, TX15 x 300mm (12") blade length. *Meets ASTM-F 1505-94.* (Germany)

No. 217SC479 (4797ESD) **$51.75**

Xcelite Series 99® Screwdriver Kits, Blades & Handles

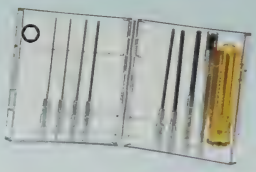
Allen Hex Socket Driver Sets

Best Sellers

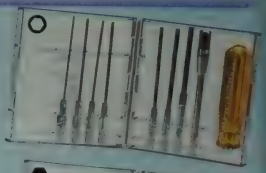
Ballpoint Allen Hex Socket Driver Set - 11 pc
Includes: Regular Handle: 1-1/16" x 4-1/8". Ballpoint Hex Socket Screwdrivers: .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16". Extension Blade: 4". **(USA)**
No. 272SC332 (99-PS-40BP) **$69.26**

Allen Hex Socket Driver Set - 11 pc
Includes: Regular Handle: 1-1/16" x 4-1/8". Allen Hex Type Screwdrivers: .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16". Extension Blade: 4". **(USA)**
No. 272SC330 (99-PS-40).....**$45.95**

Ballpoint Hex Socket Driver Set - 9 pc
Includes: Regular Handle: 1-1/16" x 4-1/8" Metric Ballpoint Hex Socket Screwdrivers: 1.27mm, 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm, Extension Blade: 4". **(USA)**
No. 272SC368 (99PS-41MMBP) ..**$56.43**



Hex Socket Driver Set - 9 pc
Includes: Regular Handle: 1-1/16" x 4-1/8". Allen Hex Socket Type Screwdrivers: 1.27mm, 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm. Ext. Blade: 4". **(USA)**
No. 272SC334 (99-PS-41MM) ..**$45.36**



Screw/Nutdriver Set – 13 pc
Includes: Regular Handle: 1-1/16" x 4-1/8". Regular Nutdriver: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8". Slotted: 3/16", 1/4". Phillips Screwdrivers: #1, #2. Extension Blade: 4". **(USA)**
No. 272SC336 .....**$58.03**

Metric Nutdriver Set – 12 pc
Includes: Regular Handle: 1-1/16" x 4-1/8". Metric Nutdrivers: 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm, Extension Blade: 4" OAL. **(USA)**
No. 272SC338 (99-PS-51mm) **$62.46**

Bristol Multiple-Spline Screwdriver Set - 11 pc
Includes: Regular Handle: 1-1/16" x 4-1/8". Bristol Multiple Spline Type Socket Screwdrivers: .048", .060", .069", .072", .076", .096", .111", .145", .183". Extension Blade: 4". **(USA)**
No. 272SC340 (99-PS-60) **$45.95**

Torx® Driver Set - 7 pc
Includes: Blades and regular handles. T10, T15, T20, T25, T27, T30. Extension Blade: 4". **(USA)**
No. 272TO007 .....**$31.97**

A. Multi-Purpose Kit 99M - 39 pc

Contains: (1) Regular handle, (1) tee handle, (9) regular nutdrivers, (1) magnetic nutdriver, (9) Allen hex, (9) bristol multiple spline, (4) slotted, (3) Phillips, (1) reamer, (1) extension blade.
Canvas roll-up case (99MP)
No. 272SC326 .....**$197.82**

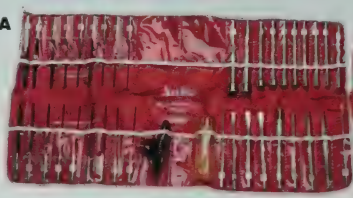
B. Roll Kit 99-PR Set - 14 pc

Includes: Regular handle; nine nutdrivers 3/16" to 1/2"; two slotted 3/16" and 1/4" and two Phillips #1 and #2 screwdriver blades.
No. 272SC328 .....**$74.27**

C. Service Master 99SM Kit - 23 pc

Includes: (1) 6" long nose plier, (1) 5" diagonal plier, (1) cushion grip adjustable wrench, (1) regular handle, (1) stubby handle, (9) regular blades, (3) nutdrivers, (2) Phillips, (2) slotted, (1) reamer, (1) extension blades.
Canvas roll-up case (99SM)
No. 272SC356.....**$170.94**

A



B

C

Xcelite Series 99® Screwdriver Handles and Accessories

Reversible Ratchet Handle
No. 272SC184 1-3/16" x 5-1/4" **$30.48**

Handles			
TT No.	Style	OAL	PRICE
272SC164	Regular	1-1/16"x4-1/8"	$4.26
272SC186	Junior	1" x 3-1/8"	$4.32
272SC218	Stubby	1-1/16" x 2"	$4.08

Tee Handles			
	TT No.	OAL	PRICE
A	272SC224	1-1/16"x4-1/8"	$5.58
Reversible "T" Ratchet Handle			
B	272SC230	3-1/2" x 2-1/2"	$30.48

Extensions

No. 272SC366 Work length 4" **$5.26**
No. 272SC364 Work length 7" **$5.70**

Power Bit Adapter

No. 272AC099.....**$5.76**

Xcelite Series 99® Blades & Handles

Slotted Screwdrivers

TT No.	Tip Size	Working Length	PRICE
272SC178	1/8"	4"	$3.82
272SC296	3/16"	4"	$3.82
272SC210	1/4"	4"	$3.82
272SC220	5/16"	4"	$4.27

Phillips Screwdrivers

TT No.	Tip Size	Working Length	PRICE
272SC298	#0	3-7/8"	$4.27
272SC300	#1	3-7/8"	$3.82
272SC302	#2	3-7/8"	$3.82

Bristol Multiple Spline

TT No.	Tip Size	Working Length	PRICE
6-Flute			
272SC238	0.048"	4"	$3.81
272SC240	0.060"	4"	$4.18
272SC244	0.072"	4"	$4.18
4-Flute			
272SC242	0.069"	4"	$4.18
272SC246	0.076"	4"	$3.76

Nutdrivers

TT No.	Tip Size	Working Length	PRICE
272SC236	3/16"	3-5/8"	$3.82
272SC258	7/32"	3-5/8"	$3.82
272SC294	1/4"	3-5/8"	$3.82
272SC314	9/32"	3-5/8"	$3.82
272SC166	5/16"	3-5/8"	$3.65
272SC172	11/32"	3-5/8"	$3.81
272SC176	3/8"	3-5/8"	$3.98
272SC180	7/16"	3-5/8"	$5.14
272SC182	1/2"	3-5/8"	$5.14
272SC228	4 mm	3-5/8"	$4.86
272SC226	4.5 mm	3-5/8"	$4.86
272SC234	5 mm	3-5/8"	$4.86
272SC232	5.5 mm	3-5/8"	$4.86
272SC256	6 mm	3-5/8"	$4.86
272SC292	7 mm	3-5/8"	$4.86
272SC312	8 mm	3-5/8"	$4.86
272SC320	9 mm	3-5/8"	$6.51
272SC170	10 mm	3-5/8"	$6.51
272SC174	11 mm	3-5/8"	$5.95
Stubby			
272SC346	1/4"	1-3/8"	$3.70
Magnetic			
272SC310	1/4"	3-5/8"	$5.95
272SC168	5/16"	3-5/8"	$6.51

Allen Hex Socket Type

TT No.	Tip Size	Working Length	PRICE
272SC188	.050"	4"	$3.46
272SC192	1/16"	4"	$3.81
272SC196	5/64"	4"	$3.46
272SC200	3/32"	4"	$3.46
272SC280	7/64"	4"	$3.46
272SC204	1/8"	4"	$3.46
272SC316	9/64"	4"	$3.46
272SC208	5/32"	4"	$3.81
272SC214	3/16"	4"	$3.46
272SC260	1.27 mm	4"	$4.88
272SC264	1.5 mm	4"	$4.88
272SC268	2 mm	4"	$4.88
272SC272	2.5 mm	4"	$4.88
272SC276	3 mm	4"	$4.88
272SC284	4 mm	4"	$4.88
272SC288	5 mm	4"	$4.88

Pozidriv® Screwdrivers

TT No.	Tip Size	Working Length	PRICE
272SC304	#1	3-7/8"	$7.17
272SC306	#2	3-7/8"	$7.17

Ballpoint Allen Hex

TT No.	Tip Size	Working Length	PRICE
272SC190	.050"	4"	$7.12
272SC194	1/16"	4"	$6.53
272SC198	5/64"	4"	$6.53
272SC202	3/32"	4"	$6.53
272SC282	7/64"	4"	$6.53
272SC206	1/8"	4"	$6.53
272SC318	9/64"	4"	$6.53
272SC212	5/32"	4"	$6.53
272SC216	3/16"	4"	$6.53

Torz® Drivers

TT No.	Tip Size	Working Length	PRICE
272T0006	T6	4"	$4.77
272T0008	T8	4"	$4.77
272T0010	T10	4"	$4.54
272T0015	T15	4"	$4.77
272T0020	T20	4"	$4.77
272T0025	T25	4"	$4.77

TORX® is a registered trademark of Textron Inc.

Xcelite Screwdriver and Socket Sets

Nutdriver Set – 11 pc

Best Seller

Drilled shaft. **Includes:** 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8". Torque amplifier handle. Color-coded handles.
No. 272SC646 (PS-120).....**$37.26**

Screw/Nutdriver Set – 11 pc

Drilled shaft. **Includes:** #1, & 1/8", 3/16", 1/4" screwdrivers, 3/16", 1/4", 5/16", 11/32", 3/8" nutdrivers, and torque amplifier handle. Color-coded handles. **(USA)**
No. 272SC650.....**$38.53**

Metric Nutdriver Set – 11 pc

Drilled shaft. **Includes:** 3mm, 3.5mm, 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 10mm, **Includes:** Torque amplifier handle. **(USA)**
No. 272SC648 (PS-121mm) **$45.95**

Hex Socket Driver Set - 9 pc

Contains: eight short Allen Blades .028", .035", .050", 1/16", 5/64", 3/32", 7/64", 1/8" and Torque Amplifier Handle. Red handles. **(USA)**
No. 272SC662 (PS 89).....**$27.60**

Hex Socket Driver Set - 9 pc

Includes: Short Metric Hex Sockets: .89mm, 1.27mm, 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm, and Torque Amplifier handle. **(USA)**
No. 272SC652 (PS 90 MM) **$31.22**

Screwdriver Set - 9 pc

Includes: short screwdrivers Slotted 3/32", 1/8", 5/32", 3/16", 1/4"; Phillips #0, #1, #2 and Torque Amplifier handle. Color-coded handles. **(USA)**
No. 272SC660 (PS 88) **$29.50**

Hex Socket and Torx Drivers

Ballpoint Hex Socket

Ideal for tightening and removing Allen-type socket thread screws in spots where you cannot reach them straight on. Will engage screw head up to 20° angle.

INCH SIZES (Amber Handles) Black oxide finish.

TT No.	Dia. Size	Blade Length	OAL	PRICE
272SC466	.050"	4"	6-5/8"	$7.86
272SC470	1/16"	4"	6-5/8"	$7.86
272SC474	5/64"	4"	6-5/8"	$7.86
272SC478	3/32"	4"	7-1/8"	$7.86
272SC522	7/64"	4"	7-1/8"	$7.92
272SC530	9/64"	4"	7-1/8"	$8.34
272SC486	5/32"	4"	7-1/8"	$8.27

Hex Socket

Amber plastic handles. For standard Allen hex socket type fasteners. Black Oxide finished blades have a length that make them ideal for reaching fasteners in hard to reach areas.

INCH SIZES (Amber Handles) Black Oxide Finish

TT No.	Hex Length	Blade Diameter	OAL	PRICE
272SC468	4"	1/16"	6-5/8"	$5.06
272SC472	4"	5/64"	6-5/8"	$5.06
272SC476	4"	3/32"	7-1/8"	$5.06
272SC520	4"	7/64"	7-1/8"	$5.10

Torx® Drivers

Blue plastic handles. Wide range of tip sizes will match most Torx requirements. Tip size is clearly etched into the side of every handle for easy reference.

TT No.	Size	Blade Length	OAL	PRICE
272SC006	T6	3"	6-5/8"	$4.96
272SC871	T8	3"	6-5/8"	$4.96
272SC872	T10	3"	6-5/8"	$5.04
272SC874	T15	3"	6-5/8"	$4.96
272SC876	T20	3"	6-5/8"	$4.96
272SC878	T25	3"	6-5/8"	$4.96

Xcelite Durable Carrying Cases

Nutdriver Set – 10 pc
Hollow shaft. **Contains:** 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2", 9/16". **(USA)**
No. 272SC428 (HS6-18) **$61.90**

Metric Nutdriver Set – 11 pc
Hollow shaft. The most frequently used metric sizes: 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 10mm, 11mm, 13mm. Contains drivers with 31.35mm depth shaft hole. **(USA)**
No. 272SC100 (4-13-MM) **$63.73**

Workbench Trays

Nutdriver set – 7 pc
Drilled shaft. **Includes:** 3/16", 7/32", 1/4", 9/32", 5/16", 11/32" and 3/8". **(USA)**
No. 272SC030 (127-TB)....**$34.37**

Hollow shaft. **Includes:** 1/4", 9/32", 5/16", 11/32", 3/8", 7/16" and 1/2". **(USA)**
No. 272SC038 (147-TB).....**$43.34**

Xcelite Fixed Handle Nutdrivers

All feature steel shafts and precision-machined sockets with plated Finish. Color-coded plastic handles for easy size identification. **(USA)**

Nutdriver Pouch Sets – 7 pc
Includes 3/16", 1/4", 5/16", 11/32", 3/8", 7/16", 1/2". **(USA)**
No. 272SC040 drilled shaft **$37.89**
No. 272SC052 hollow shaft **$43.34**

Drilled Shaft Regular

TT No.	Color Code	Hex Opening	Shaft Length	PRICE
272SC116	Black	3/16"	3"	$4.91
272SC144	Red	1/4"	3"	$4.91
272SC014	Amber	5/16"	3"	$4.99
272SC020	Green	11/32"	3"	$5.15
272SC024	Blue	3/8"	3"	$5.15
272SC036	Brown	7/16"	2-7/8"	$6.62

Full Hollow Shaft Regular

TT No.	Color Code	Hex Opening	Shaft Length	PRICE
272SC420	Black	3/16"	3"	$5.57
272SC422	Brown	7/32"	3"	$5.57
272SC424	Red	1/4"	3"	$5.57
272SC426	Orange	9/32"	3"	$5.57
272SC408	Amber	5/16"	3"	$5.57
272SC410	Green	11/32"	3"	$5.90
272SC412	Blue	3/8"	3"	$5.90
272SC414	Brown	7/16"	3"	$7.63
272SC416	Red	1/2"	3"	$7.63
272SC418	Orange	9/16"	3"	$7.63

KLEIN TOOLS Magnetic Tip Nut Driver Set – 7 pc

Full 3" hollow shaft design with Rare Earth magnetic tip. For work with long bolts. Cushion grip handles for greater torque and comfort. Color-coded handles for easy identification. Chrome plated shaft helps prevent corrosion. **Includes:** 3/16", black, 7-3/4" OAL; 1/4" red, 7-3/4" OAL; 5/16", yellow, 6-3/4" OAL; 11/32", green, 6-3/4" OAL; 3/8" blue, 6-3/4" OAL; 7/16" brown, 7-5/16" OAL; 1/2", red, 7-5/16" OAL.
No. 490SC1631.....**$70.50**

Wiha Nutdriver Sets

Inch Nutdriver Set - 7 pc
Includes: 3/16, 1/4, 5/16, 11/32, 3/8, 7/16, and 1/2".
No. 881SC193 .....**$49.84**
Metric Nutdriver Set - 7 pc
Includes: 5.0, 5.5, 6, 7, 8, 10, and 13mm.
No. 881SC194 .....**$48.32**

VIM TOOLS Nut Driver T-Handle Set -12 pc

Includes: Ratcheting T-handle; Screwdriver/T-handle; 8 blades; 2 socket wrench attachments: 1/4"; 3/8"; Plastic storage case. ***Lifetime Warranty.*** (Taiwan)
Metric - Sizes: 5, 6, 7, 8, 10, 11, 12, 13mm
No. 307SC0101 (NDM100-03) Shown **$47.64**
SAE - Sizes: 3/16", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"
No. 307SC0100 (NDI100-03) **$47.64**

Screw Holders and Starters

TECHNI-TOOL Quick-Wedge® Screw-Holding Screwdrivers

Shockproof, unbreakable Tenite II® handle with tough, durable spring steel blades. Hollow-ground bit fits any slotted screw & won't mar screw slot. Use instead of conventional screwdriver. One screwdriver drives many screw sizes. **(USA)**

TT No.	Blade Dia		Blade Tip Thickness		PRICE
758SC300	1/8" x 3"	3.18mm	.012"	.305mm	$7.88
758SC301	1/8" x 3"	3.18mm	.020"	.508mm	$7.07
758SC302	3/16" x 4"	4.76mm	.031"	.787mm	$8.26
758SC303	3/16" x 8"	4.76mm	.031"	.787mm	$8.71
758SC304	3/16" x 4"	4.76mm	.037"	.934mm	$9.07
758SC305	1/4" x 4"	6.35mm	.042"	1.067mm	$10.58
758SC306	1/4" x 6"	6.35mm	.042"	1.067mm	$10.91
758SC307	1/4" x 8"	6.35mm	.042"	1.067mm	$11.25

TECHNI-TOOL Aluminum Screw Starters

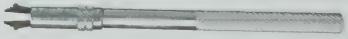
Regular - Slotted
No. 758SC309 5-5/8".....**$6.38**
No. 758SC310 9-5/8".....**$7.24**

Phillips Type
No. 758SC311 5-3/4".....**$7.02**
No. 758SC312 9-3/4".....**$7.62**

Ullman Electric Shock Resistant Phillips Screw Starter

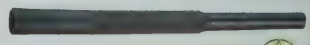
New!

Slender nylon handle allows access into confined areas. Releases and resets automatically. 2-13/16" OAL.
No. 810SC046 .....**$6.58**



TECHNI-TOOL Nut Starter

Use on small-size nuts. Fits:4-40-5/16" thread. Releases nut as threads engage.
No. 758PR040.....**$6.55**



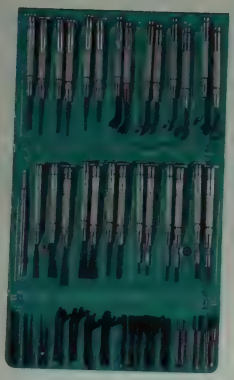
TECHNI-TOOL Small Nut Starter

Helps to hold and install small mounting hardware. Holds nut sizes regular No. 2 through small No. 6. 4" OAL. **(USA)**
No. 758IE351 (35120) **$1.62**

Best Seller

Interchangeable Tool Tips!

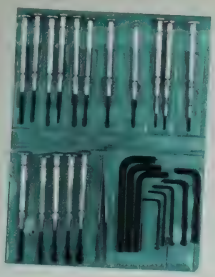
Super Deluxe Tool Set - 55 pc



Contains 27 knurled, plated steel handles (8 ball-end and 19 swivel-tops), one 3" extension and two each of the following: Slotted blades: 0.025", 0.040", 0.055", 0.070", 0.080" & 0.100"; Phillips Blades: No. 0 & 1; Hex Driver Blades: 0.028", 0.035", 0.050", 0.062", 0.078", & 0.093"; Socket Wrench Tips: 5/64", 3/32", 7/64", 1/8" & 5/32"; Offset Open End Wrench Tips: 5/64", 3/32", 7/64", 1/8", 5/32", 3/16", 1/4" and 5/16". **(USA)**

No. 580SC106 .....$149.40

Miniature Combination Tool Set - 25 pc



Set contains 16 handles with interchangeable tool ends, 8 hex keys. **Includes:** Screwdrivers: 0.055", 0.080", 0.100", 0.125"; Phillips Drivers: #00, #01, #1; Hex Drivers: 0.050", 0.062"; 0.078"; Nut Drivers: 5/64", 3/32", 7/64", 1/8", 5/32"; Short Arm Hex Keys: 1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"; Awl Blade; Tweezer: 4" OAL. **(USA)**

No. 580SC252 .....$66.95

The most complete miniature tool set available!

Deluxe Jewelers Tool Set - 67 pc

Contains: 33 complete Jewelers style drivers, 33 extra interchangeable blades and one 3" extension. **Contains:** Six slotted screwdrivers with six extra blades sizes 0.025" to 0.100"; Three Phillips drivers with three extra blades sizes #00 to #1; Six hex drivers with six extra blades sizes 0.028" to 0.093"; Five socket wrench/nut drivers with five extra blades sizes 5/64" to 5/32"; Five Torx® drivers and five extra blades sizes T-3 to T-6, and TR-8; Five Bristol spline drivers and five extra blades sizes 0.033-4" to 0.069-4"; One 3" ext. with chuck; and one 2" x 11-1/2" x 6-1/2" solid wood box. **(USA)**

No. 580SC299 .....$248.60

Interchangeable Screwdriver Sets - 6 pc

Six Swivltop™ handles and one each interchangeable blades, sizes: 0.025", 0.040", 0.055", 0.070", 0.080", & 0.100" blades. **(USA)**

No. 580SC084 .....$19.60

CONVERT ANY 1/4" FEMALE DRIVE TOOL TO ACCEPT PRECISION TOOL BLADES!

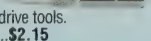
MINIATURE BIT HOLDER & BLADES

Our miniature blades have a black oxide, matte finish and are designed to reduce cam-out. **(USA)**

Hex Keys .....$2.60 /Ea.

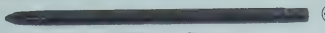
TT No.	Screw Sizes Hex	Cap	Set	Flat
580SC040	.028	-	0	-
580SC042	.035	-	1.2	0
580SC044	.050	0	3.4	1.2
580SC046	.062	1	5.6	3.4

Miniature Insert Bit Holder



Use with bits for 1/4" female drive tools.

No. 826TO204 .....$2.15



Miniature Phillips - Type

No. 580SC091 #000.....$3.65
No. 580PR090 #00 .....$2.60
No. 580AC003 #0.....$1.75
No. 580SC004 #1.....$3.15

Miniature Torx® Blades

No. 580SC097 T1.....$6.35
No. 580SC809 T2.....$6.35
No. 580SC095 T3.....$5.25
No. 580SC096 T4.....$5.25
No. 580SC087 T5.....$5.25
No. 580SC080 T6.....$5.25

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.

We reserve the right to correct misprints.

ESD Sets

Moody

ESD and Non-ESD

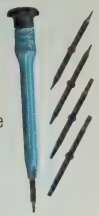
Inch Ball Hex Driver Set with Reversible Blades

Ergonomic ESD-safe or non-ESD blue anodized aluminum handles with hex swivel tops. Five double-ended chrome vanadium blades. Sizes: 0.050", 0.062", 0.078:,0.093", 0.109". Vinyl pouch.

Ergonomic ESD Handles
No. 580SC552 .....$27.90

Non-ESD Blue Anodized Aluminum Handles
No. 580SC551 .....$27.50

Reversible Star Driver Sets



Ergonomic, ESD safe or blue anodized aluminum handles with hex swivel tops. Five double-ended chrome vanadium blades for Torx® T1,T2, T3, T4, T5, T6, TR7, TR8, TR9, TR10.

Ergonomic ESD Handles
No. 580SC0346 .....$48.65

Non- ESD Blue Anodized Aluminum Handles
No. 580SC0284 .....$47.55

Slotted and Phillips Screwdriver Set - 8 pc

High tensile strength, chrome vanadium steel tool tips. **Includes:** .080", .100", .125", .141", .156" & #00, #0, #1. 6.2" OAL. **(USA)**

No. 580SC390 .....$35.10

Other Sets Available – Call!

Hard-to-find drivers feature ESD-safe handles; 6.2" long.

Tri-Point Security Screwdrivers

#0, For use on Sanyo® Phones
No. 580SC2340 .....$11.75

#1, For use on Nintendo Game Boy Advance® Products
No. 580SC2333 .....$6.20

GENERAL

ESD Precision Screwdriver Set - 5 pc

ESD-safe for use with sensitive electronics. Hardened tip and shaft for maximum work load.

Includes:

- Slotted 3/32", 1-1/2" blade length
- Slotted 1/8", 2-1/2" blade length
- Phillips, No. 00, 1-1/2" blade length
- Phillips, No 0, 2-1/2" blade length
- Phillips, No 1, 2-1/2" blade length

New!

No. 400SC713 .....$29.54

Master Technicians Bench Top Set - 50 pc

50 precision screwdrivers and nutdrivers in convenient Plexiglass frame. (Germany)

Includes: Slotted: .8, 1.0, 1.2, 1.5, 1.8, 2.0, 2.5, 3.0, 3.5, 4.0mm; Phillips: #000, #00, #0, #1; Torx: T1, T2, T3, T4, T5, T6, T7, T8, T9, T10; Metric Hex: 1.3, 1.5, 2.0, 2.5, 3.0mm; Inch Hex: .028, .035, .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32" Metric Nutdrivers: 1.5, 1.8, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5mm; Chip Lifter
No. 881SC2190 .....**$226.78**

Precision Handle Sets

Electronic Set - 7 pc

Phillips: #00, #0, #1. **Slotted:** 1/16", 5/64", 3/32", 1/8".
No. 881SC6190.....**$26.26**

Individual Slotted Screwdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
881SC6008	1/32"	1.6"	4.72"	$5.60
204SC015	1/16"	1.6"	4.72"	$4.08
881SC012	3/64"	1.6"	4.72"	$4.38
204SC025	3/32"	2.0"	5.71"	$3.56
204SC260	5/64"	2.0"	5.71"	$3.76
204SC035	9/64"	2.4"	6.69"	$3.76
881SC030	1/8"	2.0"	5.71"	$3.44
204SC603	1/8"	2.4"	6.69"	$3.66
881SC042	5/32"	5.9"	10.24"	$4.80

Individual Phillips Screwdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
881SC6102	#000	1.6"	4.7"	$5.46
204SC010	#00	1.6"	4.7"	$4.20
881SC6101	#00	3.0"	6.1"	$4.38
204SC105	#0	2.0"	5.7"	$3.76
881SC108	#0	3.0"	6.7"	$3.66
881SC261	#0	3.9"	7.6"	$4.04
881SC6109	#0	5.9"	9.6"	$4.38
204SC110	#1	2.4"	6.7"	$4.08
881SC2611	#1	3.1"	7.5"	$4.26
881SC2614	#1	3.9"	8.2"	$4.26
881SC6115	#1	5.9"	10.2"	$4.80

Precision Miniature Screwdrivers & Sets

Hex Driver Inch - 8 pc

Includes: .028, .035, .050, 1/16, 5/64, 3/32, 7/64, 1/8".
No. 204SC210 .....**$28.35**

Hex Driver Metric - 7 pc

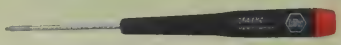
Includes: 0.7, 0.9, 1.3, 1.5, 2.0, 2.5, 3.0 mm.
No. 204SC212 .....**$26.22**

Individual Inch Hex Screwdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
881SC307	.028"/.7mm	1.6"	4.7"	$4.20
204SC309	.035"/.9mm	1.6"	4.7"	$4.08
204SC263	.050"/1.27mm	1.6"	4.7"	$3.70
881SC316	1/16"	2.0"	5.7"	$3.56
881SC320	5/64"/2.0mm	2.0"	5.7"	$3.38
881SC323	3/32"	2.4"	6.7"	$3.38
881SC2632	7/64"	2.4"	6.7"	$3.22
881SC2633	1/8"	2.4"	6.7"	$3.22
881SC6333	9/64"	2.4"	6.7"	$3.22
881SC6336	5/32"	2.4"	6.7"	$3.22

Individual Metric Hex Screwdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
881SC315	1.5mm	2.0"	5.7"	$3.70
881SC325	2.5mm	2.4"	6.7"	$3.38
881SC6330	3.0mm	2.4"	6.7"	$3.22
881SC6340	4.0mm	2.4"	6.7"	$3.22



Ball End Inch Hex Driver Set - 8 pc

New!

Angle entry up to 30°. **Includes:** .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32.
No. 881SC2649 .....**$34.22**

Ball End Metric Hex Driver Set - 5 pc

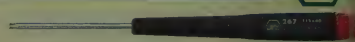
Angle entry up to 30°. Includes: 1.3, 1.5, 2.0, 2.5, 3.0
No. 881SC147 .....**$21.86**

Individual Inch Ball End Hex Screwdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
881SC413	.050"/1.3mm	1.6"	4.7"	$4.38
881SC416	1/16"	2.0"	5.7"	$4.38
204SC419	5/64"	2.0"	5.7"	$4.38
204SC423	3/32"	2.0"	5.7"	$4.38
204SC427	7/64"	2.4"	6.7"	$4.38
881SC6431	1/8"	2.4"	6.7"	$4.38
881SC436	9/64"	2.4"	6.7"	$4.38
881SC6439	5/32"	2.4"	6.7"	$4.38

Individual Metric Ball End Hex Screwdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
881SC412	1.5mm	2.0"	5.7"	$4.38
881SC6420	2.0mm	2.0"	5.7"	$4.38
881SC642	2.5mm	2.4"	6.7"	$4.38
881SC643	3.0mm	2.4"	6.7"	$4.38
881SC6440	4.0mm	2.4"	6.7"	$4.38



Torx® Set - 6 pc

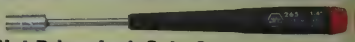
Includes: T6, T7, T8, T9, T10, T15.
No. 204SC208 ..**$32.14**

Torx® Set - 7 pc

Includes: T5, T6, T7, T8, T9, T10, T15.
No. 881SC792 .....**$37.52**

Individual Torx Screwdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
881SC703	T3	1.6"	4.7"	$4.94
881SC704	T4	1.6"	4.7"	$4.94
881SC705	T5	1.6"	4.7"	$4.94
881SC706	T6	1.6"	4.7"	$4.94
881SC707	T7	1.6"	4.7"	$4.94
881SC708	T8	1.6"	4.7"	$4.94
881SC709	T9	2.0"	5.7"	$4.94
881SC710	T10	2.0"	5.7"	$5.16
881SC715	T15	2.4"	6.7"	$5.16
881SC720	T20	2.4"	6.7"	$5.16



Nut Driver Inch Set - 8 pc

Contains one each: precision nutdriver, 2.4" (60mm) OAL: 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4". (Germany)
No. 881SC591 .....**$39.90**

Nut Driver Metric Set - 8 pc

Blade chrome-vanadium-steel. **Includes:** 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0mm. 61mm (2.4") OAL.
No. 204SC206 .....**$41.06**

Individual Inch Nutdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
881SC6523	3/32"	2.4"	6.1"	$4.52
881SC6527	7/64"	2.4"	6.1"	$4.70
881SC531	1/8"	2.4"	6.1"	$4.94
881SC6536	9/64"	2.4"	6.1"	$4.94
881SC539	5/32"	2.4"	6.1"	$4.94
881SC457	3/16"	2.4"	6.1"	$5.16
881SC6556	7/32"	2.4"	6.7"	$5.16
881SC563	1/4"	2.4"	6.7"	$5.16

Individual Metric Nutdrivers

TT No.	Tip Size	Blade Length	OAL	PRICE
881SC6510	1.5mm	2.4"	5.5"	$4.38
881SC6515	1.8mm	2.4"	5.5"	$4.38
881SC520	2.0mm	2.4"	5.5"	$4.40
881SC6525	2.5mm	2.4"	6.1"	$4.52
881SC6530	3.0mm	2.4"	6.1"	$4.62
881SC532	3.2mm	2.4"	6.1"	$4.82
881SC265	3.5mm	2.4"	6.1"	$4.70
881SC6540	4.0mm	2.4"	6.1"	$4.94
881SC545	4.5mm	2.4"	6.1"	$4.94
881SC550	5.0mm	2.4"	6.1"	$4.94
881SC266	5.5mm	2.4"	6.7"	$5.16
881SC560	6.0mm	2.4"	6.7"	$5.36
881SC6570	7.0mm	2.4"	6.7"	$5.36

Proturn Precision

Slotted and Phillips Set - 6 pc

Constructed with molded on precision handles, with rotation cap and black finish blades. Hardened CVM tool steel. **Includes:** (3) Slotted: 1.5, 2.5, 3.5; (3) Phillips: #00, 0, 1. (Germany)
No. 881SC190 .....**$23.58**

Slotted and Phillips Set - 9 pc

Constructed with molded on precision handles, with rotation cap and black finish blades. Hardened CVM tool steel. **Includes:** (6) Slotted: 1.5, 2.0, 2.5, 3.0, 3.5, 4.0; (3) Phillips: #00, 0, 1. (Germany)
No. 881SC5090 .....**$34.00**

COMPARE AND SAVE!

TECHNI-TOOL

Mini Metric Bit Set – 32 pc

Features 30 precision tools, interchangeable S-2 tool steel bits, 4-1/4" (108mm) long extension arm and 4" (101mm) precision handle. **Includes:** Torx®; T4, T5, T6, T7, T8, T9, T10, T15, T20; Slotted: 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0; Phillips: 000, 00, 0, 1; Pozidrive: 0, 1; MM: 0.7, 0.9, 1.3, 1.5, 2.0, 2.5, 3.0, 4.0. (1) Handle; (1) Extension. (Taiwan)
No. 758SC760.....$75.00 VALUE **ONLY $41.95**
Mini Inch Bit Set – 32 pc
No. 758TT676 ....$75.00 VALUE **ONLY $39.95**

KLEIN TOOLS

Mini Cushion Grip Screwdriver Set – 4 pc

Mini cushion-grip handles. Patented Tip-Ident® for quickly identifying screwdriver type and orientation. Premium chrome-plated shafts for corrosion resistance. **Includes:** Phillips, #0, 5-3/4" OAL; Keystone, 1/16" shank tip size, 4-3/4" OAL; Cabinet, 3/32" shank tip size, 5-3/4" OAL; Cabinet, 1/8" shank tip size, 5-3/4" OAL.
No. 490SC5484 .....**$23.50**

Master Technicians Bench Top Set - 50 pc

50 precision screwdrivers and nutdrivers in convenient Plexiglass frame. (Germany)

Includes: Slotted: .8, 1.0, 1.2, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0mm; Phillips: #000, #00, #0, #1; Torx: T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T15, T20; Metric Hex: .07, .09, 1.3, 1.5, 2.0, 2.5, 3.0, 4.0mm Inch Hex: 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32" Metric Nutdrivers: 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5mm; Chip Lifter

No. 881SC2092 .....**$303.40**

ESD Precision Driver Sets

Blade CVM steel, hardened chromed, ESD impact resistant handle, conductive material.

8 Pc. Hex Metric in pouch - Includes (Hex mm/blade length): .07/40, .09/40, 1.3/40, 1.5/50, 2.0/50, 2.5/60, 3.0/60, 4.0/60.

A. No. 881SC590 .....**$45.88**

8 Pc. Hex Inch in pouch - Includes (Hex inches/blade length): .050/1.6, 1/16/2.0, 5/64/2.0, 3/32/2.4, 7/64/2.4, 1/8/2/4, 9/64/2.4, 5/32/2.4.

No. 881SC7591 .....**$44.28**

7 Pc. Torx® - Includes (Torx/blade length mm): T4/40, T5/40, T6/40, T7/40, T8/40, T9/50, T10/50.

No. 881SC890 .....**$42.88**

7 Pc. TorxPlus® - Includes (Torx/blade length mm): IP5/40, IP6/40, IP7/40, IP8/40, IP9/50, IP10/50, IP15/60.

No. 881SC894 .....**$52.40**

ESD Precision Screwdriver Sets

Slotted and Phillips ESD Set - 7 pc

Includes: Slotted: 1.5, 2.0, 2.5, 3.5mm; Phillips: 00, 0, 1.

No. 881SC113 .....**$35.36**

Individual ESD Precision Screwdrivers

Slotted Screwdrivers	Phillips Screwdriver	Torx® Screwdrivers
1/16", OAL 4.72"	Blade 00, OAL 4.7"	T3 thru T6= 4.7" OAL; T9= 5.7" OAL.
No. 881SC101 .....$5.70	**No. 881SC109** $5.46	**No. 881SC119** T3.....$7.40
5/64", OAL 4.72"	Blade 0, OAL 5.7"	**No. 881SC121** T4.....$7.10
No. 881SC102 .....$4.80	**No. 881SC273** $5.16	**No. 881SC122** T5.....$7.10
3/32", OAL 5.71"	Blade 1, OAL 6.7"	**No. 881SC123** T6.....$7.10
No. 881SC104 .....$4.98	**No. 881SC112** $5.24	

Micro Bit Set - 42 pc

Includes: ESD-safe, bit-holding handle, 100mm long bit extension, 4mm hex shank, Slotted: 0.8,1.2, 1.5, 2.0, 3.0, 3.5, 4.0mm; Phillips: #000, #00, #0, #1; Torx®: T3, T4, T5, T6, T7, T8, T9, T10, T15; Hex Metric: 0.71, 0.89, 1.27, 1.5, 2.0, 2.5, 3.0, 4.0mm; Hex Inch: .028, .035, .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32".

No. 881SC996 .....**$53.60**

Interchangeable Micro Bit Set - 27 pc

Complete with slotted, Phillips, Hex inch and Torx® Precision interchangeable bits in a reusable case, set with ESD-safe precision handle. **Includes:** Slotted: 1.5, 2.0, 3.0, 4.0mm; Phillips: 000, 00, 0, 1; Torx®: T3, T4, T5, T6, T7, T8, T9, T10, T15; Hex Inch: .050, 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32"; 105mm bit extension. (Germany)

No. 881SC992 .....**$53.60**

2-in-1 Reversible Blade Sets

Slotted/Phillips Reversible Blade Set - 5 pc

Slotted blades: 1.5mm, 2.0mm, 3.0mm, 3.5mm; Phillips blades: 000, 00, 0, 1.

No. 204SC996 .....**$36.62**

Nutdriver Blade Set Metric - 9 pc

Hex blades: 2.0, 2.5, 3.0, 3.2, 3.5, 4.0, 4.5, 5.0, 5.5mm.

No. 204SC998 .....**$63.66**

Torx® Reversible - 5 pc

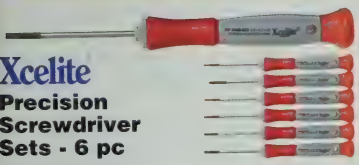
Torx® blades: T6, T7, T8, T9, T10, T15, T20.

No. 204SC995 .....**$29.88**

Slotted/Phillips/Torx® Reversible - 9 pc

Slotted blades: 1.5mm, 2.0mm, 2.5mm, 3.0mm, 3.5mm, 4.0mm; Phillips blades: 000, 00, 0, 1; Torx: T6, T7, T8, T9, T10, T15.

No. 204SC997 .....**$60.20**



Xcelite Precision Screwdriver Sets - 6 pc

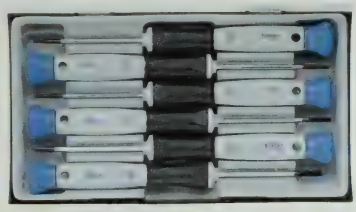
These ESD safe Xcelite precision electronic screwdriver sets are designed to maximize efficiency and production. The fast turning swivel caps w/cavity provide optimum control for precise centering. Chrome-molybdenum vanadium steel blades, and black oxide tips provide superior strength. (Germany)

Slotted/Phillips® Screwdriver Set - 6 pc; Sizes: Slotted: 1.5mm x 60mm, 2.0mm x 60mm, 2.5mm x 60mm, 3.0mm x 60mm; Phillips #0, #00.

No. 272SC601 .....**$24.58**

Torx® Set - 6 pc; T5, T6; Tamper Proof Torx® Sizes: TP7, TP8. TP10, TP15.

No. 272SC604 .....**$28.90**



Precision ESD Screwdriver Set - 7 pc

Ergonomically designed with rotating cap for minimal friction. Comfortable soft-grip anti-roll handle. ESD safe 10^8 - $10^{10}\Omega$. **Includes:** Slotted: 1.5; 2.0; 2.5; 3.0mm; Phillips: PH00; PH0. 2-3/8" blade.

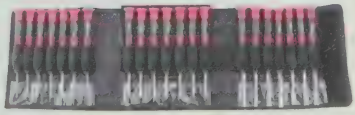
No. 204SC6186 .....**$27.00**

ESD-Safe Miniature Screwdriver/ Nutdriver Sets

Each screwdriver has precision machined tips, ESD handles, slip-resistant grip; swivel fingertip end-cap; satin chrome with black tips; hardened alloy steel.

7 pc Set: Includes: 1.0, 1.6, 2.0, 2.4mm flat tip, #00, 0, 1 Phillips tip

No. 307SC9007 .....**$21.54**



21 pc Set: Includes: 307SC9007; Torx Miniature Screwdrivers: T4, T5, T6, T7, T8, T9, T10; Metric Miniature Nutdrivers: Metric 3, 3.5, 4, 4.5, 5, 5.5, 6mm.

No. 307SC021 .....**$68.88**

New!

TECHNI-TOOL

CUSTOMIZE with your logo!

2-in1 Reversible Screwdriver

#0 Phillips, 5/16" slotted. White plastic handle with Techni-Tool logo and pocket clip. Blade 2-1/4", handle 2-3/4". 5" OAL. Customize with your company logo in minimum quantities of 1,000. Call for details.

No. 758SC001 .....$3.00

4-in-1 Stubby Quick Change Screwdriver

Includes handle and these bits: **Phillips:** #1, #2; **Slotted:** 3/16", 1/4". 3" OAL. **(USA)**

No. 189SC881 .....$3.50

4-in-1 Screwdriver

Double-end hex bits are held in each end of hex tube. Bits are reversible in tube, and tube is reversible in handle. Unique design permits quick bit change by merely reversing bit or tube. *Includes handle and these bits:* **Phillips:** #1, #2; **Slotted:** 3/16", 1/4". ***Lifetime guarantee.*** **(USA)**

No. 354SC401 .....$6.25

Xcelite

4-Way Pocket Nutdriver/Screwdriver New!

Versatile and small reversible blade screwdriver/nutdriver. Fits slotted or #1 Phillips screws and double-ended handle serves as 7/16" and 1/4" nutdriver. 4-27/32" OAL.

No. 272SC0600 .....$10.69

TECHNI-TOOL

4-in-1 Magic Magnetizer Screwdriver™

Magnetize instantly by inserting screwdriver bit into magnetizer handle—demagnetize by touching top of handle. *Includes handle and these bits:* **Phillips & Slotted Bits**: #2 x 9/32"; #1 x 3/16" **(USA)**

No. 758SC7601 (07601).....$7.50

TECHNI-TOOL

6-in-1 Silent Ratchet Screwdriver

Unbreakable ratchet mechanism. Powerful magnet holds bit and screw in place. Bits stored in handle. handle. *Includes handle and these bits:* **Phillips:** #1, #2; **Slotted:** 3/16", 1/4". **Torx®:** T15 and T20 . 7-1/2" OAL. **(USA)**

No. 758SC265.....$9.35

Wiha

New!

Insulated Multi-Bit Screwdriver - 7 pc

Slotted/Phillips multi-bit screwdriver with power handle and shaft insulated up to 1000V. Cap rotates to eliminate palm blisters and allows for one handed turning. Bit storage in handle. 1/4" magnetic bit holder. *Includes handle and these bits:* **Slotted:** 5.5, 6.5mm, **Phillips:** 0, 1, 2, 3 bits.

No. 881SC8006 .....$18.66

SK PROFESSIONAL TOOLS New!

Ratcheting Screwdriver Set - 8 pc

Ergonomic adjustable straight or pistol grip handle with cartridge-style bit holder and six bits. Push button on tool face for easy forward, reverse and neutral operation. **Includes:** Pistol driver; 1/4" x 1/4" bit holder; 1/4" x 1/4" socket adapter; **Phillips:** #1, #2; **Slotted:** 4, 5, 1/4".

No. 690SC3675 .....$29.32

Crescent

Dura-Driver™ 7-in-1 ScrewDriver

Features two double-ended bits, each with a slotted and a Phillips® blade. Both ends of the holding sleeve are nutdrivers, plus an additional nutdriver is built in the handle itself. *Includes handle and these bits:* **Phillips:** #1, 2; **Slotted:** 3/16", 9/32"; **Nutdriver:** 1/4", 5/16", and 7/16". **(USA)**

No. 272SC822 .....$5.94

TECHNI-TOOL

10-in-1 Quick Change Screwdriver

Industrial quality with maximum versatility! *Includes handle and these bits:* **Phillips:** #1, #2; **Slotted:** 3/16", 1/4"; **Torx®:** T15, T20; **Square recess:** #1, #2; **Nutdriver:** 1/4", 5/16". 9" OAL. **(USA)**

No. 758SC882 .....$6.80

TECHNI-TOOL

10-in-1 Folding Screwdriver New!

Machined aluminum folding screwdriver with interchangeable 1/4" hex bits. Locking blades holds screwdriver secure. **Bits included:** #1, #2 Phillips; 3/16", 1/4" slotted; T10, T15 torx; #1, #2 square recess; 1/4", 5/16" nutdriver. Red and silver.

No. 758SC008 .....$18.00

KLEIN TOOLS

10-in-1 Screwdriver/Nut Driver

Includes handle and these bits: **Phillips:** #1, #2; **Slotted:** 1/4", 3/16"; **Nutdriver:** 5/16", 1/4"; **Torx®:** #15, #10; **Square recess:** #1 and #2; 7-3/8" OAL. **(USA)**

No. 490SC324 .....$15.22

TECHNI-TOOL

11-in-1 Screwdriver New!

Integrated screwdriver/nutdriver shaft holds 8 universal tips and converts to 3 nutdriver sizes. Interchangeable blade for quick-and-easy switch out. Heat treated steel bits. Amber and black cushion-grip handle.

No. 758SC8151 .....$14.95

Crescent

Extends an additional 14-1/4"

Telescoping/Ratcheting Screwdriver and Nutdriver Set - 25 pc

Telescoping magnetic shaft for easy bit changing. Convenient bit storage in handle. Non-slip grip. *Includes handle and these bits:* **Nutdriver:** 3/16", 1/4", 9/32", 5/16", 11/32", 3/8"; **Slotted:** 3/16", 5/32", 1/4"; **Torx®:** #6, #8, #10, #15, #20, #25; **Square recess:** #1, #2, #3; **Phillips:** #1, #2, #3; **Hex:** 1/4", 5/32", 3/16".

No. 272SC0205 .....$19.30

SKEWDRIVER®

Pro SkewDriver™ Kit - 44 pc

Pro Roller Driver Offset Screwdriver with removable handle for power screwdriver use. ***Limited Lifetime Warranty.*** **(USA)**

No. 722PR041 .....$57.95

TECHNI-TOOL

A complete tool kit in one screwdriver!

52-in-1 Magnetizer Screwdriver

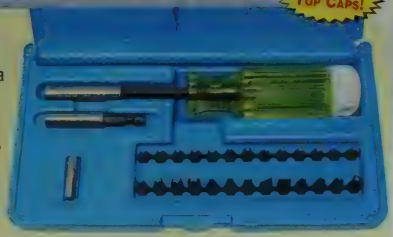
Use the full screwdriver or stubby in combination with the bits for 52 tool variations. *Includes these bits:* **Phillips:** #0, #1, #2, #3; **Slotted:** #4, #8, #10, #12; **Clutch:** 5/32", 3/16"; **Square recess:** 0, 1, 2, 3; **Nut driver, full size:** 1/4", 5/16"; **Nut driver, stubby:** 1/4"; **Torx®:** T7, T8, T9, T10, T15, T20, T25, T27, T30, T40. **(USA)**

No. 758SC0757 .....$24.95

WITH SPIN TOP CAPS!

29 Piece Multi-Bit Magnetic Driver Sets

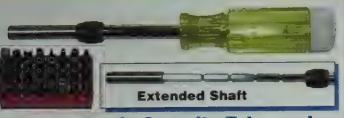
These sets include an 8" OAL driver tipped with a magnetic 1/4" hex bit holder. Driver's amber handle has a flip open spin top providing additional in-handle bit storage. Also included is a a 1/4" hex to 1/4" square drive adapter and a 1/4" hex power bit adapter (758SC4300's adapter is magnetic and 758SC4301 and 758SC4302's adapters are non-magnetic). Sets come in a blow-molded plastic carrying case.



Electronic Repair
Includes these bits:
SAE Hex: 5/64", 3/32" 7/64", 1/8", 9/64";
Pozidrive: #1, #2;
Square Recess: #0, #1, #2, #3;
Torx: T10, T15, T20, T25, T30, T40;
Slotted: 0-1, 3-4, 5-6, 8-10, 12;
Phillips: #0, #1, #2, #3;
No. 758SC4302 .....$21.50

General Purpose
Includes these bits:
SAE Hex: 5/64", 3/32" 7/64", 1/8", 9/64";
Clutch: 5/32", 3/16";
Square Recess: #0, #1, #2, #3;
Torx: T10, T15, T20, T25, T30, T40;
Slotted: 4-5, 6-8, 8-10, 10-12, 12-14;
Phillips: #0, #1, #2, #3;
No. 758SC4300 .....$21.50

Security Set
Includes these bits:
Metric Security Hex: 2.5mm, 3mm, 4mm, 5mm, 6mm;
SAE Security Hex: 3/32", 1/8" 9/64", 5/32", 3/16", 7/32";
Torx: T5, T6;
Security Torx: TT7, TT8, TT9, TT10, TT15, TT20, TT25, TT27, TT30;
Spanner: #4, #6, #8, #10;
No. 758SC4301 .....$31.50



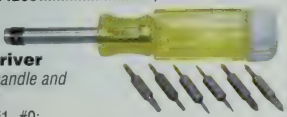
32-in-1 Magnetic Security Telescoping Screwdriver with Red Bit Holder

Includes handle and these bits:
Security Torx®: T7, T8, T10, T15, T20, T25, T27, T30, T40
Security SAE Hex: 3/32", 7/64", 1/8", 9/64", 5/32", 3/16";
Security Metric Hex: 2, 2.5, 3, 4, 5mm;
Spanner: #4, #6, #8, #10;
Triwing® Screw: #1, #2, #3, #4;
Torqset® Screw: #6, #8, #10; 1/4"
Square drive to 1/4" hex drive adapter, amber handle.
No. 758SC3542.....$21.50
Same as above with Non-telescoping screwdriver
No. 758SC4291.....$15.80

32-in-1 Magnetic Non-Telescoping Screwdriver with Black Bit Holder

Includes handle and these bits:
Phillips: #0, #1, #2, #3;
Square Recess: #1, #2, #3;
Clutch: 5/32", 3/16"; 1/4"
Torx®: T6, T7, T8, T10, T15, T20, T25;
Slotted: 3-4, 5-6, 6-8, 8-10, 10-12, 12-14;
SAE Hex: 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16";
Square drive to 1/4" hex drive adapter.
No. 758SC4290.....$15.80

12-in-1 Screwdriver



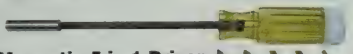
Includes handle and these bits:
Phillips: #1, #0;
JIS: #1, #0; T3, T4, T5, T6; T7, T8, T10, T15.
Double-sided bits fit in handle for easy storage.
7-1/2" OAL. **(USA)**
No. 758SC390.....$22.60

10-in-1 Security Screwdriver

Includes handle and these bits:
Security Torx: TT15, TT20;
Security and Line Head: 5/32", #4;
Phillips & Slotted Bits: #0 x 1/8", #1 x 3/16",#2 x 1/4".
Double-sided bits fit in handle for easy storage.
7-1/2" OAL. **(USA)**
No. 758SC380.....$23.20

Interchangeable Ball Hex Bit Set – 11 Pc

Includes handle and these bits:
Ball Hex Bits: .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16".
Contains amber 1/4" hex drive handle and 4" 1/4" hex drive extension. 5-1/8" OAL. Plastic box with foam.
No. 758SC018 .....$52.50



Magnetic 5-in-1 Driver

Includes handle and these bits:
Phillips: #1 and #2,
Slotted: 5-6, 8-10, **Torx:** T15 insert bits.
No. 758SC4004 3" OAL $6.70
No. 758SC4003 8" OAL $6.70
No. 758SC4002 11" OAL $8.70

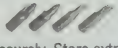
Magnetic 5-in-1 Torx Driver

Includes handle and these bits:
Torx bits: T15, T20, T25, T27, T30
No. 758SC4026 8" OAL.....$7.50
Torx bits: T7, T8, T9, T10, T15
No. 758SC4006 8" OAL.....$7.30

Magnetic 5-in-1 Security Torx Driver

Includes handle and these bits:
Torx bits: TT10, TT15, TT20, TT27, TT30
No. 758SC4027 8" OAL $9.70
Torx bits: TT7, TT8, TT9, TT10, TT15
No. 758SC4007 8" OAL $9.50

Magnetic Screwdrivers - 5 pc



Magnetic tip holds bit and screw securely. Store extra bits in plastic compartmentalized handle with 4 bits
Includes handle and these bits:
Phillips: #1, #2; **Slotted:** #4, #6. **(USA)**
No. 758SC0012 4" blade size $11.80
No. 758SC014 7" blade size $13.30

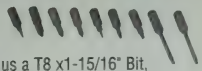
Magnetic 1/4" Screwdriver Handles

No. 758SC0350 4" blade, 8" OAL $6.00
No. 758SC0351 7" blade, 11" OAL $7.00
No. 758SC0352 11" blade, 15" OAL $8.50

Non-Magnetic 10-in-1 Security Driver

Includes handle and these bits:
Security Hex: 5/32"; **Torx:** T5, T6;
Security Torx: TT7, TT8, TT9 , TT10, TT15, TT20, TT25
No. 758SC4009 8" OAL $12.70
No. 758SC4008 11" OAL $14.70

Non-Magnetic Precision Computer Screwdriver



Includes handle and these bits:
JIS: #0 x1-15/16";
Torx: T5, T10, T15 plus a T8 x1-15/16" Bit,
Phillips: #0, #1, #2, **Slotted:** #4 Slotted
No. 758SC4028 8" OAL $11.40

Non-Magnetic Screwdriver Handles

No. 758SC0353 4" blade, 8" OAL $6.30
No. 758SC0354 7" blade, 11" OAL $7.30
No. 758SC0355 11" blade, 15" OAL $8.80

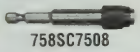
Extensions & Accessories

1/4" Magnetic Clip Extensions for Insert Bits

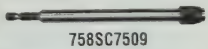
No. 758SC7503 5" OAL $3.40
No. 758SC7504 8" OAL $5.80
No. 758SC7505 12" OAL $6.45

1/4" Non-Magnetic Clip Extensions for Insert Bits

No. 758SC7500 5" OAL $3.40
No. 758SC7501 8" OAL $3.80
No. 758SC7502 12" OAL $6.45



758SC7508



758SC7509

Quick Chuck for Power Bits

No. 758SC7508 3" OAL.....$5.40
No. 758SC7509 6" OAL.....$6.60

758SC7506

758SC7507

Magnetic Bit Holder Extensions

Features C-Ring to prevent FOD
(for insert bits only NOT power drive bits)
No. 758SC7506 2-15/16" OAL $3.70
No. 758SC7507 2-1/8" OAL $3.70

Bit Adapters

1/4 sq. to 1/4 Hex Insert, 1" OAL
No. 758SC6750 .....$0.50
1/4 sq. to 1/4 Hex Power, 2" OAL
No. 758SC6850 .....$0.70
1/4 sq. to 1/4 Hex Power, 3" OAL
No. 758SC6855 .....$0.80
1/4 sq. to 1/4 Hex Power, 4" OAL
No. 758SC6860 .....$1.05
1/4 sq. to 1/4 Hex Power, 6" OAL
No. 758SC6870 .....$1.45
3/8" sq. to 1/4 Hex Power, 2" OAL
No. 758SC6875 .....$0.80

Bit Holder, 1/4" sq. to 1/4" Hex Insert (w/C-ring)

No. 758SC0900 .....$0.80

Handles contain storage compartment with swivel top.

Power Screwdrivers

Best Sellers

A. Cordless Two-Speed 2.4 Volt Screwdriver Deluxe Kit

This adjustable, swivel handle, cordless screwdriver conquers tight applications with ease. The reversing, 6-position, adjustable clutch, and 3.5 to 26 in./lbs. of torque allows two speeds: 400 and 200 rpm. **Kit includes:** two speed cordless screwdriver, (2) 2.4 volt battery packs, 120 volt AC one-hour battery charger, 1/4" chuck attachment w/key, 4 pc drill/driver bit set (1/4" socket driver w/1/4" hex, 1/8", 3/16", and 1/4" twist bits), and impact resistant carrying case. **(USA)**
No. 575PR722 Shown **$177.60**

Milwaukee

A

Basic Kit

Two-Speed Screwdriver

Kit Includes: two-speed cordless screwdriver, battery pack, charger, 1/4" chuck attachment with key, 7 pc driver/drill bit set, (2) Phillips and (1) slotted bit, and carrying case.
No. 575SC016 Not Shown **$177.60**

Two-Speed Cordless Screwdriver Mini Kit

Kit Includes: two-speed cordless screwdriver, 2.4V battery pack, 120V AC one-hour charger, (2) Phillips and (1) slotted bit. 9-3/8" OAL.
No. 575SC014 Not Shown **$140.80**

Basic Kit

B. Single-Speed Screwdriver

This cordless 190 RPM screwdriver has a convenient, two-position handle, forward/reverse button, switch lock, six-position clutch, torque to 22 in/lbs; uses standard 1/4" Hex bits. **Kit includes:** single speed screwdriver, 2.4 volt battery pack, 120 volt AC one-hour battery charger, 1/4" chuck attachment w/key, 8 pc drill/driver bit set, (2) Phillips and (1) slotted bit, and impact resistant carrying case.
No. 575SC012 Shown **$168.00**

Single-Speed Cordless Screwdriver Mini Kit

Kit Includes: single-speed cordless screwdriver, 2.4V battery pack, 120V AC one-hour charger, two Phillips and one slotted bit. 9-3/8" OAL.
No. 575SC010 Not Shown **$131.20**

Cordless Accessories

(fits 575SC014 & 575SC010)

Extra Battery Pack
No. 575AC012 ....**$33.60**

Extra Battery Charger
No. 575AC014 ....**$67.20**

B

DEWALT

Best Sellers

Heavy-Duty 7.2V 1/4" (6mm) Cordless Screwdriver Kit

This heavy-duty cordless screwdriver delivers 80 in./lbs. of Torque and has a 0-500 rpm variable speed trigger that enables maximum control during high speed usage. 100% metal gear box and a "quick release" metal chuck prevents bit "run-out." Innovative two-position handle design (pistol grip/straight) a powerful 7.2V battery pack for longer performance, bits conveniently stored in the handle. **Specs:** 2.5 lbs. (including Battery); 1.25Ah Battery Capacity; One Hour Charging Time. (Mexico)
No. 196SC920 .....**$104.75**

Get into tight spaces with maximum torque!

12V Cordless Right Angle Drill/Driver Kit

Heavy-duty 3/8" 12V right-angle variable speed drill-driver gives you the ability to control speed for greater accuracy – plus, get into tight spaces. 2 speed ranges: 0-400/0-1,200 rpm. 180 in-lbs. of maximum torque for such increased applications as turning large bits and fasteners. Weight: 4.1 lbs. Kit includes 1 hour charger, 12V compact battery and heavy-duty box. (Mexico)
No. 196IE965 (DW965K) **$206.45**

Makita

New!

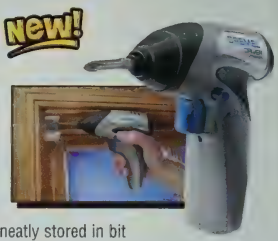
Cordless Impact Screw Driver Kit

7.2 Lithium-Ion battery. Best power-to-weight ratio at 177 in. lbs. of torque and weight of only 1.1 pounds. **Features:** True ergonomic grip, Delivers 3,000 rotational impacts/min and 2,300 RPM, Operate in straight or pistol grip positions, Li-Ion batteries and charger for two times more cycles and longer run time, Built-in LED light. **Includes:** (2) 7.2V Lithium-Ion batteries; 30 minute charger (2) Phillips (1) slotted reversible fastening bits and (1) 1/8" drill bit; Tool case. ***3-Year Tool Warranty; 1-Year Battery Warranty.***
No. 535IE020 .....**$129.05**

DREMEL

New!

Cordless Driver



Only compact driver 5" with T-handle pistol-grip design and precision variable speed trigger. Linear rpm ramp-up for extreme accuracy at low rpm. Superior control when starting small screws. Convenient docking station keeps tool charged then automatically shuts off. Includes 8-piece precision screwdriver bits set neatly stored in bit organizer pod. **Specs:** 7.2 volt motor with 300 rpm and electronic brake; automatic collet locks when trigger is released; Magnetic bitholder holds bits securely; Reversing lever changes direction without changing your grip; 3-hours charger in docking station. **Includes:** Docking station; Screwdriver bit organizer pod; Precision 1/4" hex shank, 2" screwdriver bits: Phillips" #0, #1, #2, Slotted: 1-2, 3-4, 5-6, Square drive: #2, #3.
No. 302IE2001 .....**$92.80**

LOCAL SUPPORT
28 OFFICES coast-to-coast

Panasonic

Two-Speed, 3.6V Cordless Drill & Driver Kit

This cordless drill and driver has a 22-stage clutch to offer you a more precise torque setting with a torque accuracy of ±5%. The auto shut-off clutch extends battery + clutch life by immediately stopping rotation once selected torque setting is reached. Max 39" lbs. torque. **Features**: 1/4" hex quick connect chuck; 15-minute charging system; easily converts from straight to pistol form. **(USA)**

No. 619SC622 .....**$168.95**

No. 619IE010 Battery Charger **$82.15**
No. 619PR225 Driver, No Charger **$99.20**
No. 619PR025 Battery Pack **$37.20**

Two-Speed, 2.4V Cordless Screwdriver

Uses standard 1/4" Hex drive accessories. Six-position clutch. Torque 3.5 to 26 in/lbs. Self-locking speed control. Fifteen minute charging system. Reversible. No load speed 200/400 RPM. **Includes:** Battery pack, charger, (2) Phillips bits, (1) slotted bit. (Not Shown)

No. 619PR622 .....**$134.85**

2.4V Screwdriver w/one-hour charger
No. 619SC503.....**$103.85**

Extra Battery
No. 619AC903.....**$25.95**

Panasonic

3.6V Li-ion Battery Drill & Driver

- Torque (High/Low) (13 in. lbs./ 39 in. lbs.)
- 21 Stage Clutch
- LED Light
- 1.5Ah Battery
- Auto-Stop Function

Li-ion battery provides 25% longer running time. Lightweight, compact, easy-to-reach into shallow spaces. Shuts off after 5 minutes of non-use. **Includes:** Drill, battery charge indicator, fastening clutch cover, 2 batteries, manual, case.

No. 619IE7410 .....**$210.80**

Spare 3.6V Li-ion Battery
No. 619IE910 ....**$38.75**
Battery Charger
No. 619IE010 ....**$82.15**

Panasonic

Professional Cordless Drill/Driver w/Screw Counter

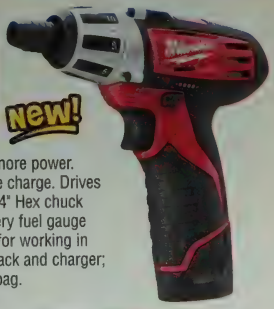
Counts and indicates number of screws driven to help prevent missed screws in assembly work. Time between counts can be set for 0-3 seconds at intervals of 0.1 seconds. Hold switch keeps count even if control panel is touched. 3.6V Li-ion battery provides longer run times than previous Ni-Cd batteries. Clutch lock cover protects torque setting. LED light illuminates dimly lit areas. Battery charger capable of charging 3.6V Li-ion and 2.4/3.6V Ni-Cd batteries. **Includes:** Drill-driver, battery, battery charger and carrying case.

No. 619IE7411 .....**$237.15**

Milwaukee

12V Sub-Compact Driver Driller

New!



100 in. lbs. of torque delivers up to 25% more power. Drives up to 30% more screws on a single charge. Drives screws up to 25% faster. Quick-loading 1/4" Hex chuck for one-hand bit loading and release. Battery fuel gauge indicates remaining runtime. Built-in LED for working in dark areas. **Includes:** 12V Li-Ion battery pack and charger; Hex insert bit 6F 7R; #2 Phillips; Storage bag.

No. 575IE4012 .....**$180.00**

Milwaukee

1/4" Hex Impact Driver

New!

850 in-lb. of torque in a compact tool, weighing less than 2.5 lbs., yet powerful enough to drive fasteners up to 75% faster and run 2 times longer. **Includes:** 12V Li-Ion battery pack and charger; Battery fuel gauge that displays remaining run time and built-in LED light to illuminate your work. ***5-Year Warranty.***

No. 575IE4502 .....**$252.03**

M12 Cordless System Tools

New!

12V Lithium-ion batteries deliver longer life and run-time with fade-free power. 1.4 amp hours; 65% lighter and 50% smaller than compact NiCad batteries. For Use with Milwaukee M12 12V tools and accessories.

12V Battery. ***2-Year Warranty.***
No. 575IE2401 .....**$51.20**

30-Minute Charger. ***5-Year Warranty.***
No. 575IE2402 .....**$59.20**

Cordless Screwdriver

New!

3.6V screwdriver uses Ni-Cd batteries with 35 continuous minutes run time per charge. Can be recharged up to 300 times. No load speed: 250 RPM. Includes (2) 1/4" hex bits (1 slotted, 1 phillips) and charger. 110V. (Taiwan)

No. 711IE1036 .....**$29.95**

TECHNI-FACT

50 years

Did you know?

Techni-Tool started in Philadelphia

The birthplace of our country. We're proud to be American owned and operated for 50 years.

Panasonic

1/2" Cordless Drill & Driver Kit

High capacity 14.4V Li-ion battery. **Features:** Electronic battery monitoring system has low battery and overheated battery indicating lamps; 390 in. lbs. power; Variable speed/reversible: Low: 60-400 rpm, High: 200-1,350 rpm; 1/2" heavy-duty keyless chuck; LED work light; Electric brake; Belt hook; Extra battery.

Drill & Driver Kit

No. 619IE7440.....**$575.90**

Makita 18V LXT Cordless Impact Driver Kit

Outstanding power-to-weight ratio at 1,280 in. lbs. of torque to 2.8 lbs weight. Lithium-Ion batteries charge 4x faster in only 15 minutes with fan cooled Rapid Optimum Charger. Built-in LED illuminates work area. Hammer and anvil are high quality steel heat hardened to last longer. Electric brake stops immediately while minimizing kickback. Easy to service. Accepts any Makita Lithium-Ion slide-style battery. 3-year warranty and tool and 1 year on battery. **Specs:** Capacity: Hex shank, 1/4"; No Load RPM: 0-2,300; Impacts/Min (IPM): 0-3,200. **Includes:** Compact Lithium-Ion batteries; 15-minute Rapid Charger, Tool Case.

A. No. 535IE142 .....**$274.15**

Makita 18V LXT Cordless 1/2" Driver Drill Kit

Delivers 450 in. lbs. of torque in a compact size and weighs 3.5 lbs. Fan-cooled 18V Lithium-Ion battery has a long runtime and 5x lower self-discharge with a 15 minute recharge rate. Accepts any Makita 18V LXT battery. Build-in LED light illuminates work area. **Specs:** Capacity: Steel: 1/2", Wood: 1-1/2"; Speed Settings: 2; No Load RPM Low: 0-400, High: 0-1,500. Includes: 2 compact Lithium-Ion batteries, 15-minute Rapid Optimum Charger, Screwdriver bits and heavy-duty case. ***3-Year Warranty on tool, 1-Year Warranty on battery.***

B. No. 535IE452 .....**$260.35**

Makita 3/8" 12V Cordless Driver-Drill Kit

The compact tool body and T-handle design provides optimum balance and comfort. Has 2-speed gear selection with variable speed in each range (0 to 350 RPM or 0 to 1,200 RPM), and total control trigger. The keyless chuck is designed for fast and easy bit changes, and the electronic brake stops the chuck quickly. **Features:** 16 torque settings and a conveniently located forward/ reverse switch; 250 in./lbs. of torque. **Includes:** (2) NiCD Batteries; Keyless Chuck; Charger; Battery Cover; Phillips/Slotted bit; Tool Case. **(USA)**

C. No. 535AC227.....**$140.07**

New!

18V 1/2" Driver-Drill Kit

Delivers 10% more power than previous models. Two 2.4 Ah NiCd batteries gives you longer run-times between charges. Clutch by-pass provides quick shifts between drill and drive modes while maintaining clutch position. Patented reversible battery pack allows the drill to fit in tight areas and provides better balance while working overhead. 1/2" metal, single-sleeve ratcheting chuck with carbide jaws provides superior grip torque on bits. **Specs:** No-load speed: 0-450/0/1-1700 PRM. **Includes:** (2) 18V battery; 1-hour NiCd AC charger; #2 Phillips 1/4" bit; Side handle, Carrying case.

D. No. 575IE2824.....**$382.40**

3x The Life - 2X The Run Life!

New!

18V Compact Drill

Built to withstand tough jobsite conditions. Longer run-time and fewer battery changes maintains momentum while you're working and prevents unscheduled breaks. The tool balance, weight, and grip have been optimized to reduce fatigue. Superior bit grip prevents frequent bit retightening and lost bits. **Features:** 1/2" ratcheting chuck - plastic sleeve; 2-speeds: 0-350 / 0-1,400; 7-3/4" compact length; Built-in LED light; Compact motor - delivers 400 in-lbs. of maximum torque; Lightweight - 4.0 lbs. **Includes:** Two 18V Li-ion batteries, 30 minute charger, belt hook, bit holder, screwdriver bit, carrying case.

E. No. 575IE0122.....**$318.40**

More features to make your job easier!

Milwaukee 14.4V Compact Series Driver/Drill with Clip-Lok™

The smaller size lets you get into tight spaces. Clip-Lok™ System lets you hang drill to your belt for convenience. Higher speed (1,400 rpm) provides faster drilling and fastening, and high 390 in.-lbs. torque delivers the power to use larger bits. 1/2" single-sleeve ratcheting chuck for superior grip on bits minimizes slipping and downtime. Cushioned, non-slip handle reduces vibration and maximizes comfort. On-board bit storage holds up to two extra driver bits. **Includes:** Clip-Lok™ system, Two low profile battery packs, Charger, Phillips bit and Impact resistant carrying case.

F. No. 575IE0612 .....**$275.20**

TECHNI-TOOL

High Speed Steel Bit Sets

Best Seller

HSS Combination Drill Bit Set – 115 pc
Made of premium industrial high grade steel. 135 degree split point (self-centering) improves penetration and prevents drill from walking on surface. Round shank. **Includes:** Bits 1/16"-1/2" x 64ths, A-Z, #1-#60. **(USA)**
A. No. 758IE151 .....**$269.64**

HSS Wire Gauge Drill Bit Set – 60 pc
Premium high grade steel bits for a wide variety of uses in steel, wood and composite materials. **Includes:** Bits 1-60. **(USA)**
B. No. 758IE150 .....**$65.04**

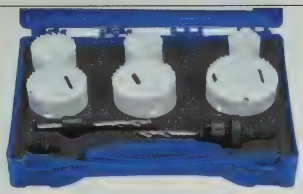
HSS Jobbers Drill Bit Set – 29 pc
Includes: Bits 1/16"-1/2" x 64th; Quick change chuck. Metal index box. **(USA)**
C. No. 758IE052.....**$79.36**

Cobalt Jobbers Drill Bit Set – 29 pc
Made of heat resistant cobalt steel. 135 degree split point self-centers and reduces thrust. Ideal for drilling in tough, high tensile-strength material. Includes waterproof, durable, rust-resistant plastic drill case.
Includes: Bits 1/16"-1/2" x 64th. **(USA)**
D. No. 758IE290.....**$165.26**

HSS Jobbers Drill Bit Set – 13 pc
Use to drill steel, plastic, wood and composite materials. Jobbers length, 1/4" hex shank. 135 degree self-centering split point improves penetration and prevents drill from walking on surface. **Includes:** Bits 1/16"-1/4" x 64th; Metal index box. **(USA)**
E. No. 758IE0130 .....**$19.51**

TECHNI-TOOL

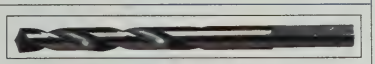
Electrician's Hole Saw Kit w/Quick-Change Arbor - 8 pc



Contains the six most-used hole saws for installation work. Features improved tooth geometry, 1-9/16" cutting depth and rugged 3/16" back plate. Bi-metal construction helps teeth stay sharp longer and reduces vibration. **Includes:** Hole saw bits: 1-1/4", 1-1/2", 1-3/4", 2-1/4", 2-3/8", 2-11/16"; 7/16" hex arbor; 7/16" hex pin drive; 1/4" pilot drill; Quick-Change arbor. (China)
No. 758IE590 .....**$75.85**

Specifically designed for cordless drills!

Mechanic Length Drill Bits



- Special Hi-Molybdenum tool steel
- Ideal for hard metal drilling applications

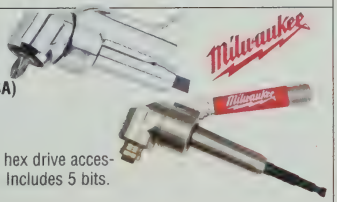
Three flats on shank for keyless chucks and 135° split point gives fast penetration and accurate starting without center punch. Shorter mechanic length is stronger for drilling into thinner metal.

13 piece set - 1/16"-1/4" by 64ths
No. 783IE6460 .....**$25.40**

15 piece set - 1/16"-1/2" by 32nds
No. 783IE6470 .....**$71.90**
21 piece set - 1/16"-3/8" by 64ths
No. 783IE7810 .....**$66.07**

29 piece set - 1/16"-1/2" by 64ths
No. 783IE6480 .....**$130.75**

Offset Right Angle Power CP Screwdriver Head



High-strength alloy housing. Adjustable 360° thumb flange. Max. torque 100 in/lbs. Driver system 1/4" hex. **(USA)**
No. 575IE2100.....**$30.32**

Right Angle Drill Attachment

For cordless drills and screwdrivers. Accepts standard 1/4" hex drive accessories. Handles high torque. 2" wide all-metal construction. Includes 5 bits.
No. 575IE8510 .....**$66.56**

Moody

Pin Vise Set - 4 pc

Set of four sizes-Capacity 0 to 0.187". For holding small rods, wires, drills, taps and other small tools. Tool steel collets. Handle is hollow to permit holding of long rods.
No. 400PR216 .....**$49.95**

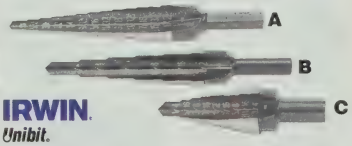
EXCELTA CORPORATION PRECISTA®

Ergonomic Pin Vise

Soft foam, easy-grip handle for comfort while doing detailed work.

3-1/2" OAL; Max. Chuck Opening: .015"
A. No. 352PR227.....**$10.91**

4" OAL; Max. Chuck Opening: .025"
B. No. 352PR2227....**$11.43**



IRWIN. Unibit.

Unibit® Step Drill Bits

Drill round holes in most metals, plastic and wood up to 1/8" thick. No center punching required with a single bit. **(USA)**

(13 Hole size/bit) 1/8" to 1/2"
A. No. 490FI016 .....**$22.68**
(6 Hole size/bit) 3/16" to 1/2"
B. No. 490FI024 .....**$22.68**
(9 Hole size/bit) 1/4" to 3/4"
C. No. 490FI020 .....**$40.88**

TECHNI-TOOL Bits *High Quality bits at an economical price. Made from S-2 tool steel with a Hardness of 59-61HRc. Made in Taiwan/USA*

Slotted Bits

1/4" Hex drive power bits.

TT No.	Size	OAL	PRICE
758SC0240	0-1	1-15/16"	$0.80
758SC0241	1-2	1-15/16"	$0.80
758SC0242	2-3	1-15/16"	$0.80
758SC0243	3-4	1-15/16"	$0.80
758SC0244	4-5	1-15/16"	$0.80
758SC0245	5-6	1-15/16"	$0.80
758SC0246	6-8	1-15/16"	$0.80
758SC0247	8-10	1-15/16"	$0.80
758SC0248	10-12	1-15/16"	$0.80
758SC0249	12-14	1-15/16"	$0.80

Phillips Bits

1/4" Hex drive insert bits.

TT No.	Point Size	OAL	PRICE
758SC0329	000	1"	$0.40
758SC0220	00	1"	$0.40
758SC0221	0	1"	$0.40
758SC0222	1	1"	$0.40
758SC0223	2	1"	$0.40
758SC0224	3	1"	$0.40

Phillips Bits

1/4" Hex drive power bits.

TT No.	Point Size	OAL	PRICE
758SC0330	000	1-15/16"	$0.80
758SC0225	00	1-15/16"	$0.80
758SC0226	0	1-15/16"	$0.80
758SC0227	1	1-15/16"	$0.80
758SC0228	2	1-15/16"	$0.80
758SC0229	3	1-15/16"	$0.80

Pozidriv® Bits

1/4" Hex drive power bits.

TT No.	Point Size	OAL	PRICE
758SC0214	00	1-15/16"	$0.80
758SC0215	0	1-15/16"	$0.80
758SC0216	1	1-15/16"	$0.80
758SC0217	2	1-15/16"	$0.80
758SC0218	3	1-15/16	$0.80
758SC0219	4	1-15/16"	$0.80

Hex Head Bits (Fits Allen®)

1/4" Hex drive insert bits; SAE.

TT No.	Hex Size	OAL	PRICE
758SC0127	.028"	1"	$0.40
758SC0128	.035"	1"	$0.40
758SC0129	.050"	1"	$0.40
758SC0131	1/16"	1"	$0.40
758SC0132	5/64"	1"	$0.40
758SC0133	3/32"	1"	$0.40
758SC0134	7/64"	1"	$0.40
758SC0135	1/8"	1"	$0.40
758SC0136	9/64"	1"	$0.40
758SC0137	5/32"	1"	$0.40
758SC0138	3/16"	1"	$0.40
758SC0139	7/32"	1"	$0.40
758SC0140	1/4"	1"	$0.40

Hex Head Bits (Fits Allen®)

1/4" Hex drive insert bits; Metric.

TT No.	Hex Size	OAL	PRICE
758SC0141	1.5mm	1"	$0.60
758SC0142	2mm	1"	$0.60
758SC0143	2.5mm	1"	$0.60
758SC0144	3mm	1"	$0.60
758SC0145	4mm	1"	$0.60
758SC0146	5mm	1"	$0.60
758SC0147	6mm	1"	$0.60
758SC0148	7mm	1"	$0.60

Hex Head Bits (Fits Allen®)

1/4" Hex drive power bits; SAE.

TT No.	Hex Size	OAL	PRICE
758SC0149	1/16"	1-15/16"	$0.80
758SC0150	5/64"	1-15/16"	$0.80
758SC0151	3/32"	1-15/16"	$0.80
758SC0152	7/64"	1-15/16"	$0.80
758SC0153	1/8"	1-15/16"	$0.80
758SC0154	9/64"	1-15/16"	$0.80
758SC0155	5/32"	1-15/16"	$0.80
758SC0156	11/64"	1-15/16"	$0.80
758SC0157	3/16"	1-15/16"	$0.80
758SC0158	7/32"	1-15/16"	$0.80
758SC0159	1/4"	1-15/16"	$0.80
758SC0160	9/32"	1-15/16"	$0.80
758SC0161	5/16"	1-15/16"	$0.80
758SC0162	11/32"	1-15/16"	$0.80
758SC0163	3/8"	1-15/16"	$0.80

Ball Hex Head Bits* (Fits Allen®)

1/4" Hex drive power bits; SAE. ***Made in the USA.***

TT No.	Hex Size	OAL	PRICE
758SC0172	5/64"	3-1/2"	$2.00
758SC0173	3/32"	3-1/2"	$2.00
758SC0174	7/64"	3-1/2"	$2.00
758SC0175	1/8"	3-1/2"	$2.00
758SC0176	9/64"	3-1/2"	$2.00
758SC0177	5/32"	3-1/2"	$2.00
758SC0178	3/16"	3-1/2"	$2.00
758SC0179	7/32"	3-1/2"	$2.00
758SC0180	1/4"	3-1/2"	$2.00

Ball Hex Head Bits* (Fits Allen®)

1/4" Hex drive power bits; Metric. ***Made in the USA.***

TT No.	Hex Size	OAL	PRICE
758SC0181	2mm	3-1/2"	$2.00
758SC0182	2.5mm	3-1/2"	$2.00
758SC0183	3mm	3-1/2"	$2.00
758SC0184	4mm	3-1/2"	$2.00
758SC0185	5mm	3-1/2"	$2.00
758SC0186	6mm	3-1/2"	$2.00
758SC0187	8mm	3-1/2"	$2.00

Spanner Security Bits

1/4" Hex drive insert bits.

TT No.	Size	OAL	PRICE
758SC0250	#4	1"	$0.40
758SC0251	#6	1"	$0.40
758SC0252	#8	1"	$0.40
758SC0253	#10	1"	$0.40
758SC0254	#12	1"	$0.40
758SC0255	#14	1"	$0.40

Torx® Bits

1/4" Hex drive insert bits.

TT No.	Driver Size	OAL	PRICE
758SC0271	T-3	1"	$0.40
758SC0272	T-4	1"	$0.40
758SC0273	T-5	1"	$0.40
758SC0274	T-6	1"	$0.40
758SC0275	T-7	1"	$0.40
758SC0276	T-8	1"	$0.40
758SC0277	T-9	1"	$0.40
758SC0278	T-10	1"	$0.40
758SC0279	T-15	1"	$0.40
758SC0280	T-20	1"	$0.40
758SC0281	T-25	1"	$0.40
758SC0282	T-27	1"	$0.40
758SC0283	T-30	1"	$0.40

Torx® Bits

1/4" Hex drive power bits.

TT No.	Driver Size	OAL	PRICE
758SC0298	T-3	1-15/16"	$0.80
758SC0299	T-4	1-15/16"	$0.80
758SC0300	T-5	1-15/16"	$0.80
758SC0301	T-6	1-15/16"	$0.80
758SC0302	T-7	1-15/16"	$0.80
758SC0303	T-8	1-15/16"	$0.80
758SC0304	T-9	1-15/16"	$0.80
758SC0305	T-10	1-15/16"	$0.80
758SC0306	T-15	1-15/16"	$0.80
758SC0307	T-20	1-15/16"	$0.80
758SC0308	T-25	1-15/16"	$0.80
758SC0309	T-27	1-15/16"	$0.80
758SC0310	T-30	1-15/16"	$0.80

Tamper Resistant Torx® Bits

1/4" Hex drive insert bits - tamper resistant. Tamper resistant Torx® screws feature a post in the center of the recess. This post will only fit into a tamper resistant Torx® bit.

TT No.	Driver Size	OAL	PRICE
758SC0311	T-7	1"	$0.40
758SC0312	T-8	1"	$0.40
758SC0313	T-9	1"	$0.40
758SC0314	T-10	1"	$0.40
758SC0315	T-15	1"	$0.40
758SC0316	T-20	1"	$0.40
758SC0317	T-25	1"	$0.40
758SC0318	T-27	1"	$0.40
758SC0319	T-30	1"	$0.40

Tamper Resistant Torx® Bits

1/4" Hex drive power bits.

TT No.	Driver Size	OAL	PRICE
758SC0320	T-7	1-15/16"	$0.80
758SC0321	T-8	1-15/16"	$0.80
758SC0322	T-9	1-15/16"	$0.80
758SC0323	T-10	1-15/16"	$0.80
758SC0324	T-15	1-15/16"	$0.80
758SC0325	T-20	1-15/16"	$0.80
758SC0327	T-27	1-15/16"	$0.80
758SC0328	T-30	1-15/16"	$0.80

1/4" Male Hex Drive Nutsetters

758SC0110 758SC0114 758SC0118

For SAE sheet metal screws; 6pt.

TT No.	Desc.	Size	OAL	PRICE
758SC0110	Non-Magnetic	1/4"	1-1/4"	$0.30
758SC0111	Non-Magnetic	3/8"	1-1/4"	$0.45
758SC0112	Non-Magnetic	5/16"	1-1/4"	$0.45
758SC0113	Non-Magnetic	7/16"	1-1/4"	$0.55
758SC0114	Magnetic	1/4"	1-5/8"	$1.60
758SC0116	Magnetic	5/16"	1-5/8"	$1.80
758SC0115	Magnetic	3/8"	1-5/8"	$1.80
758SC0117	Magnetic	7/16"	1-5/8"	$2.00
758SC0118	Magnetic	1/4"	2-9/16"	$1.80
758SC0120	Magnetic	5/16"	2-9/16"	$1.90
758SC0119	Magnetic	3/8"	2-9/16"	$1.80
758SC0121	Magnetic	7/16"	2-9/16"	$2.10

TORX® is a registered trademark of Textron Inc.

Apex's premium tool alloys and proprietary heat treat help avoid problems such as shattering and premature bit wear.

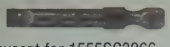
APEX

Slotted Bits

1/4" Hex drive insert bits.
Length: 1", except for 155SC4455 length: 1-1/2".

TT No.	Model No.	Screw Size	Blade Thickness	Blade Width	PRICE
155SC4450	445-000	1F-2R	.021"	.125"	$3.05
155SC544	445-00	2F-3R	.025"	.140"	$2.86
155SC445	445-0X	3F-4R	.030"	.154"	$2.88
155SC4451	445-1X	4F-5R	.034"	3/16"	$1.22
155SC4452	445-20	5F-6R	.036"	.216"	$2.60
155SC452	445-2X	6F-8R	.040"	7/32"	$1.22
155SC4453	445-3X	8F-10R	.042"	1/4"	$1.10
155SC4454	445-4X	10F-12R	.046"	9/32"	$1.17
155SC4455	445-5X	12F-14R	.050"	5/16"	$5.06

Slotted Bits



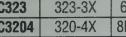
1/4" Hex drive power bits. Length: 1-15/16" except for 1555SC3266 length: 2-3/4" and 155SC323 length: 3".

TT No.	Model No.	Screw Size	Blade Thickness	Blade Width	PRICE
155SC3200	320-000X	1F-2R	.022"	.122"	$2.46
155SC320	320-00	2F-3R	.026"	.134"	$2.47
155SC3201	320-0	3F-4R	.030"	.151"	$2.53
155SC3202	320-1X	4F-5R	.034"	.187"	$2.30
155SC3211	320-2X	5F-6R	.036"	.250"	$1.81
155SC3203	320-3X	6F-8R	.038"	.250"	$1.81
155SC323	323-3X	6F-8R	.038"	.250"	$2.70
155SC3204	320-4X	8F-10R	.042"	.275"	$2.30
155SC325	320-5X	10F-12R	1.17"	.312"	$2.30
155SC3206	320-6	12F-14R	.050"	.360"	$2.98
155SC3266	326-6X	12F-14R	.050"	.360"	$9.27

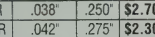
Phillips Bits

1/4" Hex drive insert bits.

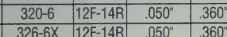
TT No.	Model No.	Point Size	OAL	PRICE
155SC460	446-0X	0	1"	$1.48
155SC440	440-1X	1	1"	$0.67
155TO402	440-2X	2	1"	$0.67
155SC443	440-3X	3	1"	$0.67



155SC4092 – 1-15/16"



155SC092 – 2-3/4"



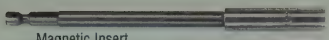
155SC0492 – 3-1/2"

155SC4902 – 6"

Phillips Bits

1/4" Hex drive power bits.

TT No.	Model No.	Point Size	Body Dia.	Turned Length	OAL	PRICE
155SC4910	4910X	0	1/8"	1-1/4"	1-15/16"	$2.66
155SC491	491X	1	3/16"	1-1/4"	1-15/16"	$1.30
155SC4092	492X	2	1/4"	1-1/4"	1-15/16"	$1.14
155SC0493	493X	3	5/16"	1"	1-15/16"	$2.25
155SC4901	4910-A	0	1/8"	2"	2-3/4"	$3.85
155SC493	491-AX	1	3/16"	2"	2-3/4"	$1.49
155SC092	492-AX	2	1/4"	2"	2-3/4"	$1.37
155SC4093	493-AX	3	5/16"	1-3/4"	2-3/4"	$2.48
155SC8285	4910-BX	0	1/8"	2-3/4"	3-1/2"	$6.45
155SC495	491-BX	1	3/16"	2-3/4"	3-1/2"	$1.91
155SC0492	492-BX	2	1/4"	2-3/4"	3-1/2"	$1.64
155SC4903	493-BX	3	5/16"	2-1/2"	3-1/2"	$2.85
155SC1049	4910-C	0	1/8"	2"	6"	$8.45
155SC1094	491-CX	1	3/16"	2"	6"	$4.15
155SC924	492-CX	2	1/4"	2"	6"	$3.84
155SC4902	493-CX	3	5/16"	5"	6"	$4.04



Magnetic Insert

Magnetic Quick Release

Bit Holders

1/4" Hex drive for 1/4" hex inserts.

TT No.	Model No.	Desc.	OAL	PRICE
155SC2490	M-490-2	Magnetic Insert	2"	$11.75
155SC101	M-490-4		4"	$20.20
155SC906	M-490-6		6"	$20.98
155SC9010	M-490-10		10"	$28.92
155SC9012	M-490-12		12"	$41.90
155SC490	QR-M-490-2	Magnetic; Quick Release	2"	$43.00
155SC0490	QR-M-490-A	Magnetic; Quick Release	2-29/32"	$19.76

1/4" Hex Drive Nutsetters

For SAE sheet metal screws; 6pt.

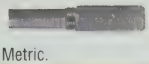
TT No.	Model No.	Desc.	Size	OAL	PRICE
155SC080	DB-08	Non-Magnetic	1/4"	2-9/16"	$12.27
155SC010	DB-10		5/16"	2-9/16"	$9.93
155SC0120	DB-12		3/8"	2-9/16"	$8.91
155SC081	MDA-10	Magnetic	1/4"	1-3/4"	$5.55
155SC110	MDA-12	Magnetic	5/16"	1-3/4"	$5.55
155SC0121	MDA-12	Magnetic	3/8"	1-3/4"	$8.97
155SC014	MDA-14	Magnetic	7/16"	2"	$20.50
155SC808	M6N-808-6	Magnetic	1/4"	6"	$24.97

Hex Head Bits (Fits Allen®)

1/4" Hex drive insert bits; SAE.

TT No.	Model No.	Hex Size	OAL	PRICE
155SC000	185-000X	.050"	1"	$8.60
155SC1850	185-00	1/16"	1"	$3.03
155SC0185	185-0	5/64"	1"	$2.45
155SC581	185-1X	3/32"	1"	$2.45
155SC1859	185-9X	7/64	1"	$2.86
155SC1852	185-2X	1/8"	1"	$2.34
155SC1085	185-10X	9/64	1"	$2.45
155SC8530	185-3X	5/32"	1-5/16"	$2.34
155SC1854	185-4X	3/16	1-5/16"	$2.45
155SC1815	185-5	7/32	1-5/16"	$3.05
155SC1856	185-6	1/4	1-5/16"	$2.48

Hex Head Bits (Fits Allen®)



1/4" Hex drive insert bits; Metric.

TT No.	Model No.	Hex Size	OAL	PRICE
155SC8515	185-1.5mm	1.5mm	1"	$4.30
155SC852	185-2mm	2mm	1"	$3.41
155SC525	185-2.5mm	2.5mm	1"	$3.41
155SC853	185-3mm	3mm	1"	$2.69
155SC854	185-4mm	4mm	1-5/16"	$2.69
155SC1855	185-5mm	5mm	1-5/16"	$2.69
155SC856	185-6mm	6mm	1-5/16"	$2.72
155SC1857	185-7mm	7mm	1-1/4"	$4.02

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.

We reserve the right to correct misprints.

Hex Extensions Adapters

Male hex drive with 1/4" male square.

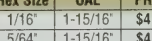
TT No.	Model No.	Desc.	Lock	OAL	PRICE
155SC252	EX-250-B-2	1/4" Socket	Ball	2"	$5.26
155IE2504	EX-250-4	1/4" Socket	Pin	4"	$6.93
155AC506	EX-250-B-6	1/4" Socket	Ball	6"	$10.42
155SC5012	EX-250-B-12	1/4" Socket	Ball	12"	$27.64
155SC370	EX-370-B-2	3/8" Socket	Ball	2"	$6.03
155SC5002	EX-500-B-2	1/2" Socket	Ball	2"	$17.91

Hex Head Bits (Fits Allen®)

1/4" Hex drive power bits; Metric.

TT No.	Model No.	Hex Size	OAL	PRICE
155SC155	AM-1.5mm	1.5mm	1-15/16"	$6.07
155SC002	AM-2mm	2mm	1-15/16"	$6.01
155SC205	AM-2.5mm	2.5mm	1-15/16"	$6.01
155SC300	AM-3mm	3mm	1-15/16"	$6.01
155SC0400	AM-4mm	4mm	1-15/16"	$6.01
155SC0500	AM-5mm	5mm	1-15/16"	$6.01
155SC0554	AM-5mm-4	5mm	4"	$28.21
155SC0556	AM-5mm-6	5mm	6"	$29.35
155SC0600	AM-6mm	6mm	1-15/16"	$6.01
155SC064	AM-6mm-4	6mm	4"	$23.57

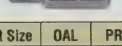
Hex Head Bits (Fits Allen®)



1/4" Hex drive power bits; SAE.

TT No.	Model No.	Hex Size	OAL	PRICE
155SC200	AM-02	1/16"	1-15/16"	$4.99
155SC021	AM-02-A	5/64"	1-15/16"	$4.99
155SC030	AM-03	3/32"	1-15/16"	$4.99
155SC003	AM-03-A	7/64"	1-15/16"	$5.00
155SC0330	AM-03-3	3/32"	3"	$22.08
155SC040	AM-04	1/8"	1-15/16"	$4.79
155SC400	AM-04-A	9/64"	1-15/16"	$4.84
155SC404	AM-04-A-4	9/64"	4"	$26.45
155SC050	AM-05	5/32"	1-15/16"	$4.79
155SC060	AM-06	3/16"	1-15/16"	$4.79
155SC070	AM-07	7/32"	1-15/16"	$5.05
155SC0800	AM-08	1/4"	1-15/16"	$4.87
155SC0010	AM-10	5/16"	1-15/16"	$5.05

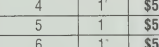
Torq-Set® Bits



1/4" Hex drive insert bits.

TT No.	Model No.	Point Size	OAL	PRICE
155AC120	212-0	0	1"	$5.49
155SC2121	212-1	1	1"	$5.49
155SC123	212-3	3	1"	$5.41
155SC124	212-4	4	1"	$5.27
155SC125	212-5	5	1"	$5.27
155SC126	212-6	6	1"	$5.27
155SC128	212-8	8	1"	$5.27
155IE210	212-10	10	1"	$5.27

Tamper Resistant Torx® Bits



1/4" Hex drive power bits. OAL: 1-15/16".

TT No.	Model No.	Driver Size	Torx Dia	Body Dia	PRICE
155SC0910	49-TX-10-H	T-10-H	.107"	.150"	$11.66
155SC0915	49-TX-15-H	T-15-H	.128"	.150"	$11.73

APEX Bits

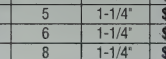
Apex's premium tool alloys and proprietary heat treat help avoid problems such as shattering and premature bit wear.

Torq-Set® Bits

1/4" Hex drive power bits.

TT No.	Model No.	Point Size	OAL	PRICE
155SC700	170-0	0	1-1/4"	$6.06
155SC702	170-2	2	1-1/4"	$6.04
155SC703	170-3	3	1-1/4"	$6.06
155SC704	170-4	4	1-1/4"	$5.98
155SC705	170-5	5	1-1/4"	$5.98
155SC706	170-6	6	1-1/4"	$5.98
155SC708	170-8	8	1-1/4"	$5.71
155SC710	170-10	10	1-1/4"	$5.71
155SC6510	265A-10	10	6"	$19.83
155SC2730	273-0	0	1-15/16"	$14.26
155SC2731	273-1	1	1-15/16"	$14.57
155SC732	273-2	2	1-15/16"	$14.26
155SC2732	273A-2	2	1-13/16"	$12.96
155SC733	273-3	3	1-15/16"	$14.26
155SC2734	273-4	4	1-15/16"	$14.26
155SC2736	273-6	6	1-15/16"	$14.26
155SC2738	273-8	8	1-15/16"	$14.07
155SC7310	273-10	10	1-15/16"	$14.07

Torx® Bits



1/4" Hex drive insert bits. OAL: 1".

TT No.	Model No.	Torxalign® No.	Driver Size	Torx Dia	PRICE
155SC4005	440-TX-05X	-	T-5	.055"	$9.03
155T0006	440-TX-06X	-	T-6	.065"	$4.66
155SC4007	440-TX-07X	-	T-7	.077"	$3.15
155SC4009	440-TX-09X	-	T-9	.097"	$2.55
155SC4010	440-TX-10X	440-TX-10-W	T-10	.107"	$2.55
155SC4015	440-TX-15X	440-TX-15-W	T-15	.128"	$2.55
155SC4020	440-TX-20X	440-TX-20-W	T-20	.151"	$2.55
155SC4025	440-TX-25X	440-TX-25-W	T-25	.173"	$2.55
155SC4030	440-TX-30X	440-TX-30-W	T-30	.216"	$2.55

Torx® Bits

1/4" Hex drive power bits. Body Dia: .119"

TT No.	Model No.	Driver Size	Torx Dia	OAL	PRICE
155SC0005	49-TX-05	T-5	.055"	1-5/16"	$7.01
155SC006	49-TX-06	T-6	.065"	1-5/16"	$6.75
155SC499	49-A-TX-06	T-6	.065"	2-3/4"	$7.48
155SC749	49-TX-07	T-7	.077"	1-5/16"	$7.01
155PR107	49-A-TX-07	T-7	.077"	2-3/4"	$7.77
155SC0008	49-TX-08	T-8	.090"	1-5/16"	$6.75
155SC008	49-B-TX-08	T-8	.090"	3-1/2"	$8.77
155SC4909	49-TX-09	T-9	.097"	1-5/16"	$7.10
155SC009	49-B-TX-09	T-9	.097"	3-1/2"	$9.24

Same as above except: Body Dia: .150"

TT No.	Model No.	Driver Size	Torx Dia	OAL	PRICE
155SC910	49-TX-10	T-10	.107"	1-15/16"	$4.30
155SC049	49-B-TX10	T-10	.107"	3-1/2"	$5.58
155SC051	49-C-TX10	T-10	.107"	6"	$7.78
155SC0015	49-TX-15	T-15	.128"	1-15/16"	$4.30
155SC4915	49-C-TX15	T-15	.128"	6"	$8.11

Same as above except: Body Dia: .171"

TT No.	Model No.	Driver Size	Torx Dia	OAL	PRICE
155SC973	49-TX-20	T-20	.151"	1-15/16"	$4.30

Same as above except: Body Dia: .193"

TT No.	Model No.	Driver Size	Torx Dia	OAL	PRICE
155SC974	49-TX-25	T-25	.173"	1-15/16"	$4.30

Bit Sets

TECHNI-TOOL

Electronic Repair - 101 pc

Best Seller

This multi-bit magnetic driver set is made from S-2 tool steel for screwdrivers, wrenches and variable speed drills. **Includes:** Phillips: # 0, 1, 2, 3: Pozidrive: # 0, 1, 2, 3: Torx: T8, 10, 15, 20, 25, 27, 30, 40, 45; Torx Tamperproof: T8, 10, 15, 20, 27, 30, 35, 40; Hexagon: 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4"; Hexagon Tamperproof: 5/64", 3/32", 7/64", 1/8", 9/64", 5/32"; Hexagon Metric: 1.5, 2, 2.5, 3, 4, 5, 5.5, 6, 8mm; Hexagon Metric Tamperproof: 2, 2.5, 3, 4, 5, 5.5, 6mm; Triwing: 1, 2, 3, 4; Torque Set: 6, 8, 10; Slotted: 3, 4, 4.5, 5, 5.5, 6, 6.5, 7, 8; Spanner: 4, 6, 8, 10; Clutch: 5/32", 3/16", 1/4"; Square Recess: 0, 1, 2, 3; Spline: 5, 6, 8mm; Wingnuts Magnetic Bit Holder: 1/4H to/4 Hex; Socket Bit Holder: 1/4 sq. to 1/4 Hex; Extension: 1/4 sq. x 1/4 Hex 1; 1/4 sq. x 1/4 Hex 2". (Taiwan). 4" blade/8" OAL magnetic screwdriver handle w/bit storage. **(USA)**

101 pc. Kit with amber handle driver
No. 758SC4382 .....$26.25

100 pc. Kit (Handle not included)
No. 758SC110 .....$20.90

TECHNI-TOOL

Power Bit Set – 36 pc

Industrial quality tool steel power bits for cordless drills, screwdrivers, and socket wrenches. 36 piece, 1/4" drive, 3" power bit set housed securely in a storage box. **Includes:** (5) Phillips: 2 - #1, 2 - #2, 1 - #3; (4) Slotted: 2-4, 4-5, 5-6, 8-10; (6) Metric Hex: 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm; (5) Fractional Hex: 3/32", 7/64", 1/8", 9/64", 5/32"; (7) Bits for Torx® Screws: T10, T15, T20, T25, T27, T30, T40; (5) bits for Torx® Tamper Proof Screws: T10, T15, T20, T25, T27; Square Recess: (3) #1, #2, #3; (1) 1-1/4" sq. to 1/4" Hex Socket Adapter: 3"
No. 758SC4379 .....$16.80

TECHNI-TOOL

Power Screwdriver Bit Set - 39 pc

1/4" shank professional bit set with most variable speed drills, power screwdrivers (max. 2500 RPM), adapters and hand drivers. **Includes:** #1, 2, 3 Phillips; #2 reduced Phillips; 3-4, 6-8, 8-10, 10-12 Slotted; #0, 1, 2, 3 sq. Recess; 1/8", 5/32", 3/16", 1/4" Clutch; T8, T9, T10, T15, T20, T25, T27, T30, T40 Tee*Star™; 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16 hex recess (Allen); 4 extra #2 Phillips & magnetic bit holder. **(USA)**
No. 758SC5305 .....$31.45

Security and Tamper-Proof Bit Set - 35 pc

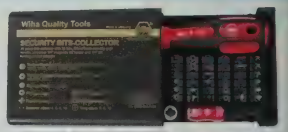
Includes: (9) Tee*Star™: T8, T10, T15, T20, T25, T27, T30, T35, T40; (4) Spanners: #4, 6, 8, 10; (6) Hex Fractionals: 5/64, 3/32, 7/64, 1/8, 9/64, 5/32; (6) Hex Metrics: 2, 2.5, 3, 4, 5, 9mm; (3) Torq Set Screws: 6, 8, 10; (4) Tri Wing® Screws: 1, 2, 3, 4; (1) Magnetic Bit; Case. (Taiwan)
No. 758SC500 .....$20.95

Security Bits Sets - 39 pc

Wiha

Bring all of your most needed bits with you on any job. **Includes:** Handle; 1/4" bit holding socket adapter; bits: Torx TR8, TR10, TR15, TR20, TR25, TR27, TR30, TR40; Triwing: 1, 2, 3, 4; Torq: 6, 8, 10; Spanner: 4, 6, 8, 10; Hex sizes: 5/64, 3/32, 7/64, 1/8, 9/64,5/32; Slotted: 6.5, 8.0mm; Phillips: 1, 2; Pozidriv: 0, 1, 2, 3; Square: 1, 2,3. (Germany)

A



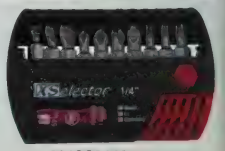
A. Security BitsCollector with quick release bit holder
No. 881SC991.....$75.04

B

B. Bits Collector with Security Bits Set with 1/4" magnetic bit holder
No. 881SC7199.....$72.14

XSelector sets include 10 hardened bits of chrome-vanadium-molybdenum steel. 1/4" quick release holder can be used in power tools. Quick bit access through integrated bit clamp. Fits in pocket: 3-1/8" x 2-1/8" x 1/2".

Wiha



881SC9443

Slotted, Phillips and Torx® Bits
No. 881SC9443 .....$22.86

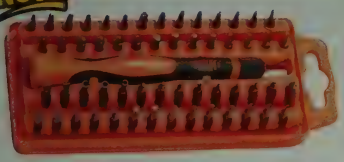
Hex Bits
No. 881SC9446 .....$24.82

Torx® Bits
No. 881SC9445 .....$27.26

Tamper Resistant Torx® Bits
No. 881SC9447 .....$34.22

Bit Sets

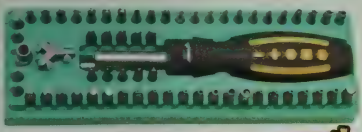
New!



Precision Electronics Screwdriver Set - 58 pc

Chrome Molybdenum Vanadium steel micro bits. 1.1" length. Ergonomic double-molded non-slip lightweight handle. **Includes:** Phillips: #000, #00, #1; Slotted: 1.0mm, 1.5mm, 2.0mm, 2,5mm, 3.0mm, 3.5mm, 4.0mm; Tamper-proof Torx: T5H, T6H, T7H, T8H, T9H, T10H, T15H, T20H; Torx: T4, T4, T6, T7, T8, T9, T15, T20; Hex: 1.5mm, 2mm, 2.5mm, 3mm, 1/16", 5/64", 3/32"; Ball-end Hex: 0.7mm, 0.9mm, 1.3mm, 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 0.028", 0.035", 0.05", 1/16", 5/64", 3/32"; Pozidriv: 2mm, 2.3mm, 2.5mm; Tri-Point: #0, #1; Triangle Recess: TR1; Bit Holder/Female Hex: 2mm.

No. 711SC219 .....**$32.40**



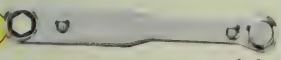
New!

Security Bit Set - 62 pc

Includes: M5, M6, M8; C1, C2, C3; Flat: 1/8", 3/16"; Triangular: 2mm x 2mm x 2mm; Square: S0, S1, S2, S3; Triblade: 1, 2, 3, 4, 5; Phillips: 0, 1, 2; Wing nut driver; Quadblade: 6, 8, 10; Phillips: PZ0, PZ1, PZ2; Two pin: 4, 6, 8, 10, 12; Spline w/hole: T-5, T-6, T-8, T-10, T-15, T-20, T-25, T-27, T-30, T-40; Hex w/hole: 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm, 5/64", 3/32", 7/64", 1/8", 9/64", 5/32"; 1/4" x 60mm magnetic bit holder; Bit holder socket; Socket adapter; Ratchet screwdriver; Molded plastic case with clear cover which itemizes all bits.

No. 711SC081 .....**$30.00**

Conforms to GGG-S-1408



GENERAL

Great leverage for those hard-to-get-at screws!

Ratchet Offset Screwdriver Set – 5 pc

For reaching inaccessible screws where leverage desired. Driver is plated steel and instantly adjusts for right or left-hand use. Hardened tempered steel blades. Five piece set includes 1/4" and 3/8" straight blades, No. 1 and No. 2 crosspoint blades and handle. Conforms to GGG-S-1408. **(USA)**

No. 400SC071 (8071 Set).....**$12.50**

No. 1 & 2 crosspoint blades with handle

A. No. 400SC016 (807X).....**$10.16**

1/4" straight & No. 2 blades with handle

B. No. 400SC014 (807SX).....**$9.03**

Wadsworth Falls

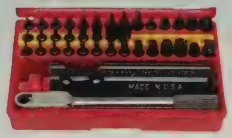
Best Seller

Mini-Ratchet Tool Set - 52 pc

This Mini-Ratchet and metal bits are high quality tool steel drawn heat treated and torque-tested to Fastener Institute Standards and can deliver 400-inch pounds of torque to drive and remove all type fasteners. **Contains:** 4 tools, 44 bits, 3 removable bit caddies (Yellow for metric bits); high polished stainless steel drive handle with 12° ratcheting action; ratchet extension; and bit end cap for thumb pressure. **Includes:** (12) Inch Hex Bits: .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16"; (8) Metric Hex Bits: 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm, 8mm; 9 Slotted Screw Bits: No. 0 thru 4, 5, 8, 10, 1/4"; (5) Phillips bits: P0, P1, P2, P3, P4; (8) "6 spline" bits: T9, T10, T15, T20, T25, T27, T30,T40; 1/4" Socket adapter. ***Lifetime Warranty.*** **(USA)**

No. 307SC344.....**$75.50**

Mini Ratchet Tool Set - 44 pc



Get into smaller, tighter spots with less effort and up to 400 in. lbs. of torque. Compact and easy to use. **Includes:** Super-mini ratchet, 4-9/16" OAL; Screwdriver handle; Extension 4-9/16"; Bit end cap; 12 Hex bits: .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 3/16", 7/32", 1/4", 5/16"; 8 Metric hex bits: 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm, 3mm, 4mm, 5mm, 6mm, 8mm; 9 Slotted bits: #0, #1, #2, #3, #4, #5, #8, #10, #10; 5 Phillips: #0, #1, #2, #3, #4; 1 Reed + Prince; 1-1/4' Socket adapter; Large molded polypropylene case.

No. 857IE003.....**$71.50**

Crescent Dura-Driver™ Ratcheting Kit - 39 pc

Kit has a 3-position high torque ratchet with a hidden bit storage. The handle is designed with a no-slip grip to stop slippage for higher torque. The S2 industrial steel bits and chrome vanadium sockets with true fit hex design prevent rounding and stripping to nuts and bolts. **Includes**: (1) Dura-Driver™ Ratchet Screwdriver; (9) Fractional Sockets: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", and 1/2"; (9) Metric Sockets: 5, 6, 7, 8, 9, 10, 11, 12, 13mm; (18) Screwdriver Bits: Phillips: #1, 2, and 3; Slotted: 3/16", 5/32", 1/4"; Square Recess: #1, 2, 3; Torx: #10, 15, 20, 25, 30, 40; Hex: 5/32", 3/16", and 1/4"; (2) Socket Adapters: 1", 2". (Taiwan)

No. 272SC777 .....**$27.49**

New!

S-K Professional Tools Stubby Ratcheting Screwdriver Set - 21 pc

Ideal for working in tight spaces. **Includes:** Stubby ratcheting screwdriver; 1/4" x 1/4" socket adapter; 1/4" sq. x 1/4" sq. Hex bit holder; 1/4" sq. x 1/4" sq. flexible socket adapter; #1, #2, #3 Phillips bits; 4, 5, 5.5, 6.5, 1/4" slotted bits; T10, T15, T20, T25, T27, T30, T40 Torx bits, #1, #2 Pozidriv bits; Plastic case.

No. 690SC3676 .....**$29.32**

THE Chapman MFG. Company

All kits contain a heavy-duty, twenty tooth midget ratchet made of stainless steel. Short 18° working arc. Easy one-handed bit changes. Use with stackable 3-5/8" extension and screwdriver handle. 3-3/4" OAL.

Offset Inch/Metric Screwdriver Kit - 27 pc

Includes: Midget Ratchet; Extension; Screwdriver Handle; Bits: Allen Hex-.050", 3/32", 9/64", 7/32", 1/16", 7/64", 5/32", 1/4", 5/64", 1/8", 3/16"; Slotted: 3/16", 1/4", 3/8"; Phillips: #1, #2; 1/4" Sq. Drive.; Metric, Allen Hex: 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm, 6mm.

A. No. 232SC022.....**$30.50**

A

Offset Inch/Metric Screwdriver Kit - 20 pc

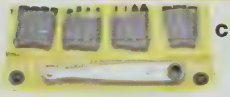
Best Seller

Includes: Midget Ratchet; Extension; Screwdriver Handle; Bits: Allen: .050", 5/64", 7/64", 3/16", 1/8", 7/32", 1/16", 9/64", 1/4", 3/32", 5/32", 5/16"; Slotted: 1/4", 3/8"; Phillips:#1, #2; 1/4" Sq. Drive.

B. No. 232SC018 .....**$25.10**

B

Offset Inch Hex Screwdriver Kit - 16 pc



Includes: Midget Ratchet; Bits: Allen: .050", 1/16", 5/64", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 5/16"; Slotted: 1/4", 3/8"; Phillips: #1, #2; 1/4" Sq. Drive.

C. No. 232SC012 .....**$15.90**

C

The fastest AC power tool you can buy!

DREMEL

3956-02 Variable Speed MultiPro® Super Kit – 77 pc

Our Quality Promise 5 YEAR Limited Warranty

- The original Dremel tool
- 5,000 - 35,000 RPM does all the work
- Provides improved ergonomics, precision and control
- Comfort grip housing with anti-slip grip
- Replace motor brushes
- Click and set on/off switch

Ideal for the widest range of project using various speed ranges. Choose this high-speed, precision handheld rotary tool with ball-bearing motor to drive a wide variety of bits at any speed from 5,000 to 35000 RPM. **Contains:** Variable speed Model 395 MultiPro® tool (302FI395); 77 assorted accessories; 225 Flex-Shaft attachment; Carbon motor brush set; (2) 1" blue spring clamps; Dremel® keyless chuck; Wrench; Quick-change collet nut; Window organizer case and sharpener.
Five-Year Limited Warranty. **(USA)**
No. 302IE39562 .....$114.66

3962-02 Variable Speed MultiPro® Kit – 75 pc

Our Quality Promise 5 YEAR Limited Warranty

Contains the same variety of tools as the 3956-02 kit (shown above) with the exception of the 225 Flex-Shaft attachment, (2) 1" blue spring clamps and sharpener. ***Five-Year Limited Warranty.*** **(USA)**
No. 302IE6202 .....$104.26

395 Variable-Speed MultiPro™ Tool
Includes 10 assorted bits, open end collet wrench, quick-change collet nut and quick start book.
No. 302IE395 .....$77.38

DREMEL

400 Series XPR Rotary Tool Kits

Improved motor for more performance up to 35,000 rpm. Ergonomic contoured styling with soft grip areas for greater comfort and control. **Features:** Separate on/off switch; Speed control dial for 5000-35,000 rpm speed range; Convenient collet lock button with lock-out feature for quick accessory change; Dove tail feature for new attachments.

Features:

- High-performance rotary tool
- Flex shaft for fine detail work and hard-to-reach places (400-6/90 Only)
- Circle cutter for cutting perfect circles in a variety of materials
- Tool sharpener for edging tools
- Cutting guide for using your rotary tool as a cut-out saw
- Multi-saw ideal for cutting in tight spaces where other saws can't reach
- Storage case for organizing and transporting all your attachments
- Quick start instruction book

Specs: Power: 120VAC, 50-60Hz; Amps: 2.0; Power cord: 6';

Model 400-2/51
Includes: rotary tool, circle cutter, lawn mower and garden tool sharpener attachment, and 51 accessories in storage case.
No. 302IE251 .....$114.66

Model 400-6/90
Includes: rotary tool, planer tool, multi-saw, flex light, cutting guide, and 90 accessories in mini storage case.
No. 302IE690 .....$189.70

302IE251

Our Quality Promise 5 YEAR Limited Warranty

302IE690

DREMEL

7700-02 7.2V Cordless MultiPro® Kit - 50 pc

Two-speed (10,000 and 20,000 rpm) cordless tool and 50 included bits are perfect for a wide variety of jobs. **Features:** Light, compact and easy-to-handle; Ball bearing shaft drive for smooth operation; Shaft lock button and a unique knurled collet nut make changing bits easy without the need for tools; 3-hour battery charger with LED charging indicator.
Two-Year Warranty.

7700-02 Kit
No. 302IE7702 .....$59.14

Extra Battery Pack
No. 302AC757.....$28.66

TECHNI-TOOL Tomorrow's Products Shipped Today
Phone: 1-800-832-4866 or 1-610-941-2400

DREMEL

Stylus™ Rotary Tool

The Dremel Stylus™ is an ergonomic tool perfect for applications such as finishing, intricate sanding, polishing, cleaning, engraving and much more. **Includes:** 24 accessories.

Features:

- Fits comfortably in your hand
- Patented nose tip control - on/off at front of tool for one handed operation
- Variable speed 5,000 - 25,000 RPM for superior performance and control
- Pistol grip design for outstanding balance, performance and precision control
- Docking station holds the stylus during projects while charging battery.
- 7.2V integrated lithium ion battery holds a charge 6 times longer than Ni-Cd
- No battery "memory effects" - Can be recharged at anytime without reducing charge capacity

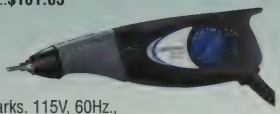
No. 302IE1100 .....$92.80

10.8V Lithium-Ion Cordless Rotary Tool

Cordless rotary tool offers the power and freedom to tackle any project, anywhere. The tool's variable speed control allows you to set the tool speed to match an accessory to the task at hand and features the longest run-time of Dremel's cordless models. Battery holds charge for two years while in storage. Includes 40 various accessories. ***Two-Year Warranty.***

No. 302IE8002 .....$101.65

290 Engraver



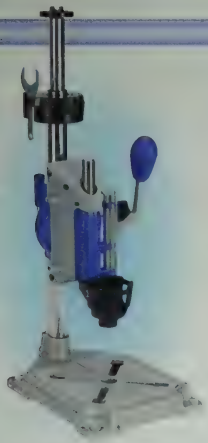
Writes like a pencil on material from hardened steel to glass. Calibrated stroke adjustment dial regulates depth of engraving from fine lines to deep marks. 115V, 60Hz., 0.2 Amp., 6,500 - 13,000RPM. *(1 Carbide point included)*

No. 302FI110 .....$26.66

Diamond Engraving Point
No. 302FI434 .....$18.92

Carbide Replacement Point
No. 302FI432 .....$6.14

DREMEL Accessories



DREMEL New!

220-01 Workstation™

It's a drill press, tool holder and flex shaft holder all in one. Drills accurate perpendicular and angled holes in 15 degree increments up to 90 degrees horizontal. Holds tool for sanding and buffing. Telescoping holder extends from 16" to 29". Depth markings with stops provide consistent depth adjustment up to 2". Sturdy metal base with 4 clamping points secures workpiece. Fits Tool Models: 275, 285, 300, 395, 398, 400, XPR, 780, 800. **Includes:** Workstation attachment, mounting wrench, instructions.

No. 302IE220 .....$46.38

A precision miniature drill press!

Microlux Drill Press

For labs, electronics, jewelry and model work. 5" x 9" cast aluminum table base and housing machined surface. Three-speed belt drive, 2100, 4500, 6500 RPM. Ball bearing spindle with 1-1/4" travel. Three-jaw chuck and key, .028" to 1/4" capacity. Sliding gauge for drilling in-line holes. 3/4" plated column; calibrated depth control. Adjustable chuck-to-table distance, 0" to 6". 110 volt AC high torque motor.

No. 561PR111 .....$185.55

DREMEL

Flex-Shaft Attachment

Attaches to Dremel Tool Nos. 275, 285, 395, 398. Complete with 36" long cable with 1/2" dia. handpiece. **(USA)**

No. 302FI225 .....$30.90

SEE www.TECHNI-TOOL.com FOR FULL ACCESSORY LISTINGS

3/32" Shank Engraving Cutters

Tip	TT No.	Model No.	Tip Size	PRICE/Ea.
	302FI012	105	1/32"	$2.62
	302FI014	106	1/16"	$2.62
	302FI108	108	1/32"	$2.62

1/8" Shank Hi-Speed Cutters

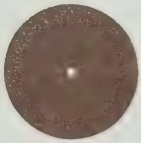
Tip	TT No.	Model No.	Tip Size	PRICE/Ea.
	302FI044	125	1/4"	$5.22
	302FI058	190	3/32"	$5.22
	302FI191	191	1/8"	$5.22
	302FI066	194	1/8"	$5.22

Not for use with hardened materials.

1/8" Shank Bristle & Carbon Steel Brushes

Tip	TT No.	Model	Description	Dia.	PRICE/Ea.
	302FI134	403	Bristle; wheel	3/4"	$2.62
	302FI136	404	Bristle; cup	1/2"	$2.62
	302FI138	405	Bristle; end	1/8"	$2.62
	302FI180	428	Carbon; wheel	3/4"	$2.62
	302FI194	442	Carbon; cup	1/2"	$2.62
	302FI196	443	Carbon; end	1/8"	$2.62

Cut-Off Wheels For Use With Mandrel 302PR402 (402)



Fiberglass reinforced. 1-1/4" dia. .045" thick. 5/Pk.
No. 302FI001 (Model 426) $7.94
H.D. Emery. 15/16" dia. .040" thick. 20 per vial.
No. 302FI166 (Model 420) $5.94
Emery. 15/16" dia. .025" thick. 36 per vial.
No. 302FI146 (Model 409) $5.52

DREMEL New!

$50.00 if purchased separately!

Accessory Kit – 75 pc

Embossed accessory storage tin with micro storage case.

Includes 75 assorted accessories:

- (32) Cut-off and Polishing wheels
- (1) Fiberglass reinforced wheel
- (1) Polishing compound
- (1) Carbon steel brush
- (2) Grinding stones
- (1) Silicon carbide stone
- (1) High-speed cutter
- (33) Sanding bands, disks and cutters
- (3) Mandrels
- (1) Drill bit

No. 302IE0701 .....$20.80

Tips & Handle are Interchangeable with Circon Products

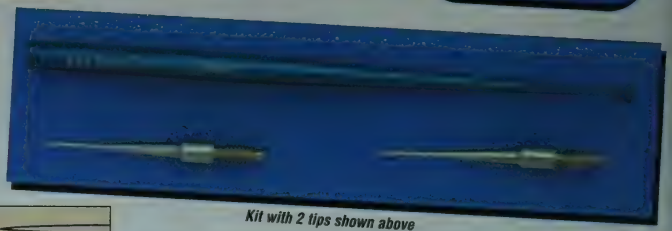
Realistically proportioned microscopy tools!

TECHNI-TOOL

Precision Miniature Tools Handle

Best Seller

Featherweight, anodized aluminum handle holds a variety of screw-in tools. **Specs:** Weight: 0.21 oz., 4.8" long.
No. 758IE240 Handle only **$9.61**

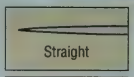


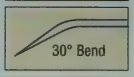
Kit with 2 tips shown above

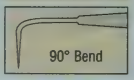
Precision Miniature Tools

Miniature tools are specifically designed for industrial and electronic use. They are ideal when you need precision product instruments smaller than normal. Each of the interchangeable tips has a threaded base and is precision manufactured with superior finishes.

Miniature diamond scribes are general purpose scribing tools for industrial and laboratory use. They scribe a fine line on even the hardest materials - glass, metal, ceramic etc. Applications are numerous and include scribing under a microscope.



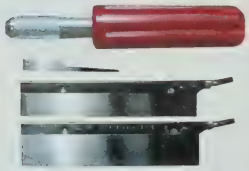




Tip	TT No.	Description	PRICE	TT No.	2 Tools & 1 Handle (Save on kits!)	PRICE
A. Sharp Needle/Probe - strong tungsten alloy with 0.0005" radius tip						
	758IE2801	Straight	$29.33	758IE2805	Straight Kit	$66.21
	758IE0283	30° Bend	$32.13	758IE2830	30° Bend Kit	$71.65
	758IE289	90° Bend	$35.19	758IE0289	90° Bend Kit	$75.90
B. Sharp Needle/Probe - stainless steel						
	758IE2800	Straight	$19.98	758IE2810	Straight Kit	$48.02
	758IE283	30° Bend	$21.68	758IE2835	30° Bend Kit	$51.42
	758IE2890	90° Bend	$21.68	758IE2895	90° Bend Kit	$51.42
C. Blunt Needle/Probe - stainless steel						
	758IE2820	Straight	$19.89	758IE2840	Straight Kit	$46.24
D. Sharp Needle/Probe Hook - stainless steel						
	758IE9028	Straight with 90° Hook	$25.50	758IE0928	Straight with 90° Hook Kit	$58.82
	758IE1802	Straight with 180° Hook	$26.35	758IE8028	Straight with 180° Hook Kit	$60.44

Tip	TT No.	Description	PRICE	TT No.	2 Tools & 1 Handle (Save on kits!)	PRICE
E. Sharp Microscopic Knife - hardened stainless steel, 0.040" cutting edge						
	758IE0032	Straight	$26.95	758IE3200	Straight Kit	$61.62
F. Microscopic Knife - hardened stainless steel, .100" cutting edge						
	758IE1001	Straight	$40.80	758IE1005	Straight Kit	$87.98
G. Sharp Microscopic Chisel – hardened stainless steel, 0.030" cutting edge						
	758IE032	Straight	$26.95	758IE3205	Straight Kit	$61.62
	758IE0302	30° Bend	$32.90	758IE3210	30° Bend Kit	$73.10
H. Tungsten Carbide Scribe/Probe - strongest tungsten alloy with 0.0005" radius tip						
	758IE280	Straight	$27.63	758IE2815	Straight Kit	$62.89
I. Diamond Scribe - quality natural diamond sharpened to 60° included angle cone point						
	758IE020	Straight	$28.90	758IE0200	Straight Kit	$65.37
	758IE203	30° Bend	$31.88	758IE2030	30° Bend Kit	$71.14
	758IE0209	90° Bend	$34.85	758IE2090	90° Bend Kit	$75.23
J. Diamond Scribe - .010" pin, 60° included angle, quality natural diamond						
	758IE1060	Straight	$45.90	–	N/A	–
	758IE0360	30° Bend	$48.03	–	N/A	–
	758IE0960	90° Bend	$51.43	–	N/A	–
K. Microscopic Lance - stainless steel with two 0.040" cutting edges						
	758IE0400	Straight	$76.50	–	N/A	–
L. Microscopic Spatula - stainless steel						
	758SO453	30° Bend	$28.90	–	N/A	–
	758SO450	Straight	$27.63	–	N/A	–

Saws



Deluxe Razor Saw/Knife Set
No. 5 knife, handle and one/ea. of razor saw blade. No. 890PR048, No. 890PR050, & No. 890PR052. Plus No. 890PR036 keyhole saw blade and five assorted knife blades. Fitted storage tray with see-through cover.
No. 890PR238 .....**$17.18**

Knife Chest Sets

Tool Chest
Includes: Style 1 knife w/ Style 11 blade; Style 2 knife w/Style 2 blade; Style 5 knife w/ Style 19 blade; Style 7, 11, 13, 16, 17, 22, 24, 26, & 28 blades; jeweler's screwdriver; block plane; block sander; spoke shave; balsa stripper; two routers, four gouges, pin vise, three drill bits and coping saw with blade. In wooden box.
A. No. 890PR154 .....**$73.80**

Deluxe Knife Chest
Includes: Style 1 knife with Style 11 blade, Style 2 knife with Style 2 blade, Style 6 knife with Style 24 blade and 14 assorted blades. In wooden box.
B. No. 890PR150 .....**$33.30**

Knife Chest
Wooden chest contains one each #1,#2, #5 (precision, medium & heavy-duty) knives and ten assorted blades. In wooden box.
C. No. 890PR148 .....**$25.62**

Knives

PROEDGE™

Soft Handle Knife

For cutting plastic, wood, paper, cloth, film, circuit board traces, and more. Comfortable soft grip handle, 4 jaw chuck, super sharp #11 blade with safety cap and, convenient rear blade release. 5" x 3/8".

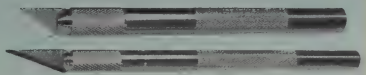
A. No. 615IE1040 Red **$4.56**
B. No. 615IE1041 Blue.....**$4.56**
C. No. 615IE1044 Black **$4.56**
No. 615IE1042 Green.....**$4.56**
No. 615IE1043 Purple.....**$4.56**

(**Style 1**) Aluminum handle. 12.382cm OAL Style 11 blade.
No. 890PR068.....**$2.40**
No. 1 Knife with 15/pk of Style 11 blades
No. 890PR162.....**$7.38**

High-impact plastic guard. (For Style 1 Knife)
No. 890PR174 .....**$0.96**

12.7cm aluminum handle. No. 24 blade.
No. 890PR070 (Style 2) **$3.42**

With plastic guard. Hexagonal chuck resists rolling.
No. 890PR082 (Style 1) **$6.96**
No. 890PR084 (Style 2) **$9.09**



Double knife set: Style 1 knife and Style 2 knife handles, plus style 1 & Style 2 blade assortments.
No. 890PR140.....**$11.10**

BD Beaver® Handles and Blades

Stainless steel round, knurled handle 10.0 cm L x 50 cm D.
No. 180IE4310 .....**$93.80**

Mini Blade

Ideal for precision cutting of micro-circuitry masks and traces. Straight angle. **24/box**

Smaller alternative to #11
No. 180IE6500 .....**$120.00**

Smaller alternative to #15
No. 180IE6700 .....**$130.45**

TECHNI-TOOL

Retractable Knives

Best Sellers

9RX Knife - .080 blade
No. 758IE009.....**$5.75**
Replacement .080 Blades
No. 758IE247.....**$0.65**
5095 Knife - .170 blade
No. 758IE5095.....**$6.75**
Replacement .170 Blades
No. 758IE251.....**$0.47**

(**Style 3**) Pen knife, metal barrel. Plastic cap clips to pocket. No. 10 blade. 13.335cm
No. 890PR160 (Style 3) **$5.76**

Plastic handle, metal blade lock. No. 19 blade. 10.795cm OAL
No. 890PR074 (Style 5) **$4.14**

Knife Blades

Blades	Best Sellers	Fits Style	5 Pk. of Blades	Bulk Pack 100	Bulk Pack 200
	(#10) For fine general cutting, carving, and correcting stencils	1, 3	890PR010 $2.64	609IE033 $25.95	–
	(#11) Extremely sharp point for fine angle cutting & stripping	1, 3, 4	890PR012 $1.83	609IE172 $25.95	609IE2172 $45.00
	(#11SS) Same as (#11) 890PR012 but stainless steel	1, 3 4	890PR032 $2.19	–	–
	(#91) Modified No. 890PR012 w/a higher included angle, less pointed	1, 3, 4	–	890PR196 $37.40	–
	(#16) Stenciling, scoring, etching	1, 3	890PR022 $1.83	609IE016 $25.95	–

Blades	Best Sellers	Fits Style	5 Pk. of Blades	Bulk Pack 100
	(#17) Chisel blade for narrow cuts	1, 3	890PR217 $2.24	890PR178 $37.80
	(#24) Close corner cuts for templates, mats, deburring, trimming, stripping, gasket cutting	2, 5, 6	890IE224 $2.24	890PR190 $32.28
	(#18) 12.7mm Chisel blade for deep cross cuts and paint scraping	2, 5, 6	890PR026 $2.19	609IE018 $25.95
	(#22) General shaping, whittling, trimming removes excess flashing	2, 5, 6	890PR038 $2.79	609IE1422 $25.95

Scalpels

Scalpel Handles

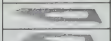
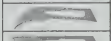
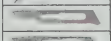
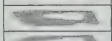
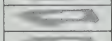
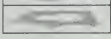
Contour scalpel blades are easily attached with a simple, sliding motion. Made from a nickel-silver alloy.

For blades 21, 23 and 25
A. No. 609IE004.....**$6.00**

For blades 10, 11, 12 and 15
B. No. 609IE003.....**$4.50**

Scalpel Blades

For precision cutting in micro-circuitry, masks and friskets. Made with computerized technology and quality control systems to assure uniform cutting edges and a perfect fit on handle. Sterilized using 2.5 MRads gamma radiation, then individually wrapped in foil and hermetically sealed. **100/Pk.**

100 BLADES PER PACK!					
		Stainless Steel		Carbon Steel	
Blades	Style	TT No.	PRICE	TT No.	PRICE
	10	609IE110	$33.75	609IE210	$24.75
	11	609IE111	$33.75	609IE211	$24.75
	12	609IE112	$33.75	609IE212	$24.75
	15	609IE115	$33.75	609IE215	$24.75
	21	609IE121	$33.75	609IE221	$24.75
	23	609IE123	$33.75	609IE223	$24.75
	25	609IE125	$33.75	609IE225	$24.75

Pocket Knives

M16®MIL Knife

Designed for military and police use. Special safety features include the "Carson Flipper" blade extension (which makes opening easier and serves as a blade guard) and stainless steel locking liners. Hard anodized olive drab handle with a black Teflon®-plated blade made of AUS 8 stainless steel. 3.56" blade features triple-point™ serrated cutting edge. Closed length: 4.63". (Taiwan)

No. 255IE1613 .....**$89.99**

M16® SRT

Features one-hand opening and closing, sure-grip contoured aluminum handle. Dual grind Tanto blade locks open and offers maximum strength. 3" black Teflon blade with serrated edge section for rugged cutting tasks. Open length: 7.375"; Closed length: 4.25".

No. 255IE1612 .....**$89.99**

Black Chive Knife

Premium high-carbon 420 stainless steel featuring a 1-15/16" blade with a boron carbide finish for extra durability. Special coating is chip, crack and peel resistant; impervious to most chemicals, acids and bases; eliminates corrosion; and maintains lubrication longer. **(USA)**

No. 487IE1600 .....**$82.95**

Electricians' Knives

TECHNI-TOOL

Electricians' Knife

Both a knife and screwdriver. Screwdriver blade has sharp edge for scraping insulation and locks into place. Heavy-duty bail hangs onto belt clasp. **(USA)**

No. 758IE1550.....**$15.25**

KLEIN TOOLS New!

Cable/Lineman's Skinning Knife

Three-inch blade withstands frequent scoring and slitting of cable jacket. Blade and ring are securely molded in handle. Notch on blade back for removing wire insulation. Comfort textured handle with finger grooves and guard. Red handle. 8" OAL.

No. 490IE157 With ring (Shown).....**$18.05**

No. 490IE1570 Without ring.....**$17.80**

Utility Knives

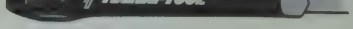
TECHNI-TOOL

Retractable Blade Utility Knife

Best Seller

Button projects and retracts blade to three positions– full, half and one-quarter out. Light aluminum safety grip handle provides blade storage. Furnished with three blades. Enamel gray finish. **(USA)**

No. 758PR020 .....**$3.10**



TECHNI-TOOL

13-Point Snap Knife

Now you can always have a knife handy with this fully retractable knife and a pocket clip. Includes 1 blade. **(USA)**

No. 758IE7565 .....**$2.80**

No. 758PR032 Refill blades - 10/Pk **$1.20**

TECHNI-TOOL

Handy Cutter

Handy, all-metal cutter. Glossy, painted finish. Tap open, tap close. Safe and easy blade change. Contains one single-edge blade. **(USA)**

No. 758PR100 .....**$4.80/Dz.**

TECHNI-TOOL

Razor Blade Scraper

Use it as a scraper. **Features:** one single-edge changeable and retractable razor blade. 4" OAL.

No. 758PR050.....**$1.16**

IDEAL

Electrician's Utility Knife

When you're using a tool all day, you need it to be comfortable. Say goodbye to those old, metal utility knives. Introducing a durable knife with a soft, non-slip, Santoprene® grip. Cushioned blade-slide provides smooth movement into 8 blade positions. Convenient front blade loading eliminates the need to disassemble knife. Handy retractable storage compartment for spare blades. Integrated string cutter.

No. 462IE300 .....**$10.49**

Wiss

Quick Change Utility Knife

This no-nonsense tool is comfortable, easy-to-use, and made to last. Stores up to 5 standard blades and has a simple design that makes changing blades easy and fast. **Features:** Durable all-metal construction; Comfortable rubber grip; Nine blade positions; Safety guarded string/twine cutter works with blade fully retracted.

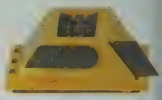
No. 272IE500 .....**$8.58**

Folding Utility Knife

Push button to change blade quickly. Safety folding lock for easy storage.

Includes: 5 blades.

No. 711IE253 .....**$9.20**



100 piece utility knife blades with dispenser. High grade carbon steel.

No. 711IE261 .....**$12.00**

Razor Blades

TECHNI-TOOL

Replacement Utility Knife Blades

Pointed, razor-type, utility knife blades. For use in knife No. 732PR020 (above) and many styles of retractable utility knives. 2-7/16" x .025".

Standard Blades (Shown)

No. 758PR048 5/Pk **$1.04**

No. 758PR092 100/Pk **$10.60**

Heavy-Duty Refill Blades 100/Pk

No. 758PR118 (Not Shown) **$27.30**

Industrial Razor Blades

Blades degreased, protected by shelling paper in boxes lined with VPI paper. Blades .009"W.

No. 146PR052 100/Pk **$7.00**

IRWIN

Unbreakable Bi-Metal Safety Blades

Premium unbreakable bi-metal steel knife blades. Spring steel provides flexibility and strength to cutting edge. Last longer than traditional blades. **5/pk.**

No. 644IE2084 .....**$1.85**

ASR Cleanroom Razor Blades

Blades degreased, cleaned, and specially bagged for cleanroom use. .009"W. **(USA)**

No 146PR451 10/Pk.....**$5.00**

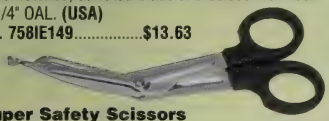
Techni-Tool® Scissors

TECHNI-TOOL

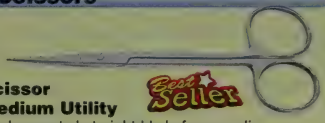
Quick-Clip® Speed Cutters
Stainless steel replaceable blades. Heavy-duty contour-designed Delrin® frames. With sharp points. 4-3/4" OAL. Cut length 1".
No. 758SC042 .....$5.25
Replacement blades
No. 758IE704 Sharp $2.13/Pair

Bent Trimmers
The finest quality nickel-plated solid steel shears.
No. 758SC106 Cut length 3-1/8"; 7" OAL..$12.44
No. 758SC108 Cut length 3-5/8"; 8" OAL..$12.67

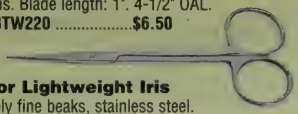
Ergonomic Lineman's Scissors
Made of high carbon steel with nickel plating to stand up to years of use. These ergonomic scissors have notches, serrated blade and scissor-run feel. 6-1/4" OAL. **(USA)**
No. 758IE149.....$13.63



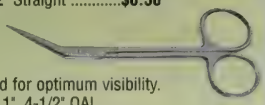
Super Safety Scissors
Stainless steel. Cuts to 24 gauge copper wire. One side serrated. 5-1/2" OAL.
No. 758SC644.....$5.90



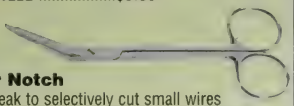
Scissor Medium Utility Best Seller
Finely serrated straight blade for non-slip cutting at the tips. Excellent for shielding foils, thin films. Blade length: 1". 4-1/2" OAL.
No. 758TW220 .....$6.50



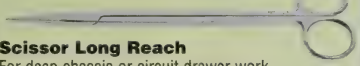
Scissor Lightweight Iris
Extremely fine beaks, stainless steel. Surgical quality for small places and delicate work. 4-1/2" OAL. Blade length: 1".
No. 758SC012 Straight $6.50



Scissor Angle
60° angle bend for optimum visibility. Blade Length: 1". 4-1/2" OAL.
No. 758TW222 .....$6.50



Scissor Angular Notch
Notched beak to selectively cut small wires or cable lacing. Blade length: 1-1/8". 5" OAL
No. 758TW216 .....$6.50



Scissor Long Reach
For deep chassis or circuit drawer work. Smooth blades. Stainless steel. Blade length: 1-1/4". 7-1/4" OAL.
No. 758TW218 .....$7.50

Electricians' and Utility Scissors

TECHNI-TOOL

A. Electronics Scissors
Fully-nickel-plated, hot-drop-forged, solid steel scissors. Double sharp points; flat pattern; ring handles.
No. 758SC134 Cut length 1-3/8"; 4" OAL $12.04
No. 758SC136 Cut length 1-1/2"; 4-1/2" OAL....$12.30
No. 758SC140 Cut length 2-5/8"; 6-1/8" OAL....$13.41

B. Electricians' Scissors
Fully nickel-plated solid steel scissors; hot forged. Scraper & file on back edge of blade. Double stripping notch, one for 19 gauge (0.035 in.) wire and one for 23 gauge (0.022 in.) wire. 5" OAL, cut length 1-7/8". **(USA)**
No. 758SC050 .....$8.62
No. 758IE5102 Import $6.50

Wiha **Multipurpose Electrician's Heavy-Duty Shears**
High alloy carbon steel; hardened, burnished surface. Straight, micro-toothed cutting. 5-3/4" OAL.
C. No. 881IE2610.....$16.48

Wiss **8" Take-apart Utility Scissor**
Corrosion-resistant stainless steel blades separate for cleaning. Ergonomically designed polypropylene grips. Serrated blades for better grip and easier cutting.
D. No. 272IE0080 .....$10.69

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.
We reserve the right to correct misprints.

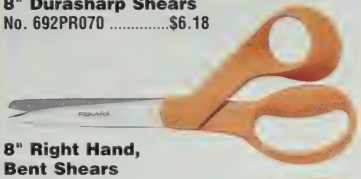
FISKARS

Fiskars® Cutters and Shears feature heavy-duty, precision-ground stainless steel blades and comfort grip ABS handles or easy-grip ergonomic handles.

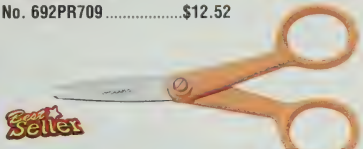
5" Specialty Shears Best Seller
Ergonomic grip handles for right/left handed use. Ideal for heavy users.
No. 692IE921 .....$12.22

10-1/4" Softouch® Shears
Ergonomic, lock for safety.
No. 692PR097 .....$16.32

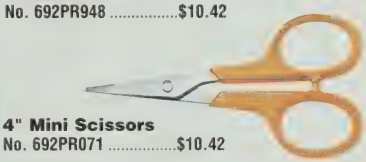
8" Durasharp Shears
No. 692PR070 .....$6.18



8" Right Hand, Bent Shears
No. 692PR709.....$12.52



Best Seller
5" Mini Scissors
No. 692PR948 .....$10.42



4" Mini Scissors
No. 692PR071 .....$10.42

4-1/4" Micro Scissors
Features: The combination of serrations and hand ground shaving-sharp cutting edges let you cut delicate, fine and soft fibers and wire. High carbon stainless steel blades. Plastic handles.
No. 487IE1215.....$21.95

Snips

TECHNI-TOOL

10" Auto-Latch Aviation Snip
Spring-loaded latch automatically releases with slight handle pressure. Non-slip inserts. Ideal for cutting 18 AWG. Straight blade. 10" OAL; Cut length: 1-1/2".
No. 758IE500.....$10.40

Wiss

Heavy-Duty Utility Snip
Spring-loaded blades and soft-touch co-molded handles reduce fatigue on repeat cuts. Stainless steel corrosion-resistant blades include wire cutter notch for light-gauge wire. Includes safety latch to lock blades for storage. 9" OAL.
No. 272IE2006 (WEZSNIP) **$8.70**

Multi-Master™
Make long, fast cuts in material including: plastic, sheet metal, aluminum, vinyl, stainless steel, kevlar, fiberglass and many more. The non-slip, serrated jaws and non-slip textured grips create a compound action cutter which multiplies the force of the hand by five times. Cuts up to 20-gauge steel. **(USA)**
No. 272PL300 .....**$15.57**

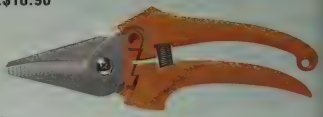
Electronics and Filament Snips
Length of cut is 3/4". Hot drop forged. Straight blades. Coil wire spring.
No. 272SC120 5" OAL **$17.04**

Xcelite

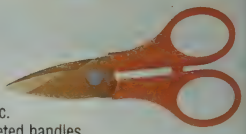
Electronic Snip
Shearing action of 1-1/2" cut. Pointed blades prevents peaks on fine wires and filaments. Also removes insulation and cuts light sheet metal. Latch holds blades closed. Cushion Grip handles. 6-1/2" OAL.
No. 272SC148 .....**$27.82**

FISKARS

8" Titanium Nitride SoftGrip Multi-Snips
Adjustable pivot screw maintains precise cut.
No. 692IE7922 .....**$18.90**



7" All-Purpose Snip
Fiskars® feature heavy-duty, precision-ground stainless steel blades and comfort grip handles.
No. 692PR370 .....**$10.72**



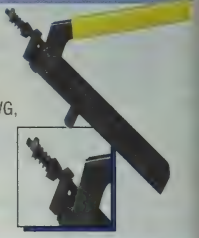
Titanium Nitride Mighty Snip
Resists scratches, wear and corrosion. Ideal for cutting thin wire, string and plastic. Serrated blade holds material in place. Riveted handles for heavy-duty cutting in a convenient, compact size. 4-1/2" OAL. **(USA)**
No. 692IE6984 .....**$18.52**

Nibblers

LINDSTROM

Metal Nibbler
Strong handles with sleeves for comfortable grip. Simple operational safety lever. Small distance between handles allows for easy cutting. For cutting flat sheet, square or cylindrical tubing. Snips off the waste curl when closing the handles and leave a clean, square cut. Cutting capacity: Stainless 0.0315"/21 ga.; Cold rolled 0.047"/18 ga.. 10" OAL.
No. 844PR926 .....**$81.50**

KLEIN TOOLS



Nibbler Cutting Tool
Cuts sheet metal, plastic, & tubing with a squeeze. Cut a hole, notch, edge, or trim a piece of material down to any size or shape. Cuts steel up to 18 AWG, copper up to 1/16", aluminum up to 1/16", plastic up to 1/16", tubing from a 1" I.D.
No. 828PR376.....**$25.85**
Replacement Blades
No. 490PR012.....**$12.45**

Hammers

A. Plumb® Fiberglass Curve Claw Hammer
High-luster, full-polished finish; Octagon shaped neck with unbreakable fiberglass-core handle and molded nylon jacket for improved grip. Comfortable contoured handle reduces fatigue. Enlarged handle base for butting material. Factory balanced for maximum striking power. Permabond® construction between head and handle.
No. 272IE1401 20 oz. .....**$17.89** **No. 272IE1404** 16 oz. **$16.64**

B. Plumb® Ball Pein Hammer - Hickory Handle
Black ground head. Polished peins. Select quality hickory handle. Strong Permabond® handle to head attachment. 4 oz., 10-1/2" OAL.**(USA)**
No. 272IE494.....**$9.52**

C. Power Drive® Dead Blow Hammer
Shot loaded for no-bounce effect, fiberglass handle, and ergonomic grip. Non-marring. 12" OAL. **(USA)**
No. 602SA009 8 oz. .....**$21.78** **No. 602SA010** 16 oz. **$24.87**

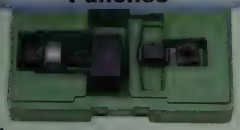
D. SPS™ Composite Interchangeable Tip Hammer
With a broad range of interchangeable striking faces, these hammers offer the ultimate in versatile surface protective performance. Striking faces vary from soft to extra-hard. Fiberglass-reinforced composite body designed for non-marring protection and to eliminate metallic contamination. Hammer weighs 6 oz., and is used with 1" diameter striking faces. ***Sold separately (see below).***
No. 602IE600.....**$12.82**

1" Dia. Striking Tips

TT No	Color	Face	PRICE/2 Pk.
602IE102	Brown	Soft	$7.43
602IE103	Red	Medium	$7.43
602IE104	Green	Tough	$7.43

TT No	Color	Face	PRICE/2 Pk.
602IE106	Cream	Med-Hard	$9.03
602IE108	Black	Hard	$9.03
602IE109	Yellow	Extra Hard	$9.03

Punches



GREENLEE

Greenlee® Electronic Connector Punches

Cut-out and mounting slots are punched in one operation. Drill one 7/16" pilot hole. Fast, accurate panel punching with no sawing or filing. Use either manual wrench or hydraulic punch driver methods. **(USA)**

No. 414PR229 Size 9 pin **$655.22**
No. 414PR231 Size 15 pin **$655.22**
No. 414PR232 Size 25 pin **$655.22**
No. 414PR234 Size 37 pin **$707.34**
No. 414PR238 Size 50 pin **$707.34**

SLUGOBUSTER

Knockout Punches With Ball Bearing Drive

Produce clean, true holes in seconds. Simply insert the punch in small drilled hole and a few quick turns with a hand wrench does the job. Cuts through up to 16-gauge metal. Complete 11 piece set for 1/2" to 1-1/4" conduit. **(USA)**

No. 414SA098 .....**$230.33**

Slug-Out™ Set/w Ratchet Wrench

Punches up to 12 AWG stainless and up to 10 AWG mild steel. The four-point cutting edge design allows slug to drop automatically. **Includes:** Ratchet wrench; 1/2", 3/4", 1", 1-1/4", 1-1/2" and 2" punches and dies; 1/2" bearing and drive screw; 3/4" – 2" mechanical drive screw; Storage case. **(USA)**

No. 396IE520 (KOW520) **$372.69**

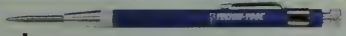
Challenge Tool D-Subminiature Panel Punches

Mounting holes accurately located & center-punched. Burr free. Supply of adhesive-backed templates and all necessary screws & wrenches provided with kit. **(USA)**

9 pin, RS449 standards
No. 229PR009 .....**$199.00**

Center Punches

TECHNI-TOOL



Auto Center Punch

Automatically strikes a blow when downward pressure is applied — no hammer needed. Adjustable cap for strength of blow. Hardened steel points suitable for metal, plastic, wood and more. **(USA)**

No. 758IE600 (Shown) **$8.60**

Replacement Point
No. 758IE0600 .....**$3.50**

GENERAL

Automatic Punch

Adjustable for heavy or light impressions. It is also perfect for spotting metals, or plastics. 5" OAL.

Best Seller

Punch Tool
No. 400PR138 .....**$23.56**

Replacement point
No. 400PR142 .....**$3.42**

GENERAL

Drive Pin Punch Set - 8 pc

4" long steel tools–heat treated, ground and polished. **Includes:** 1/16", 3/32",1/8", 5/32", 3/16", 7/32", 1/4", 5/16", and wood case.

No. 400SA084 .....**$33.74**

Punch Kits

MAYHEW TOOLS

Punch Kits

4-PC. BRASS – knurled for easy handling. **Includes:** 3/8 pt. drift punch, 1/4 pt. and 3/8 pt. pin punch, 1/4 pt solid punch, in a pouch.

No. 544IE2277 .....**$44.75**

6-PC. PILOT PUNCHES
Includes: 1/8 pt., 5/32 pt., 3/16 pt., 7/32 pt., 1/4 pt., 5/16 pt., in a pouch.

No. 544IE2250 .....**$54.73**

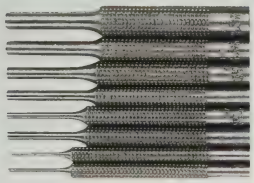
544IE2277 544IE2250

Punch and Chisel Kit - 6 pc

MAYHEW TOOLS

Hand forged from alloy steel. Full finish, S-2 tool steel. **Set Includes:** (2) Pin punches, 1/8" x 4-3/4" OAL, 3/16" x 5-1/4" OAL; (1) Center punch, 3/16" x 5" OAL; (1) Solid punch, 3/16" x 5" OAL; (2) Cold chisels, 1/2" x 6" OAL, 5/8" x 6-1/2" OAL. *Meets ANSI & ASTM standards.* **(USA)**

No. 544PR751 .....**$42.43**



Knurled Pin Punch Kit - 8 pc

MAYHEW TOOLS

Contains: Eight No. 475 pin punches: One each of 1/16", 3/32", 1/8", 5/32", 3/16", 7/32",1/4", 5/16". 4" OAL. Comes in a plastic pouch. **(USA)**

No. 544PR480 .....**$44.02**

Reamers

GENERAL

Reamer

Has many uses, such as removing burrs and enlarging small holes in mild metals, wood, plastics, etc. Plastic handle. Cap; 1/8"- 3/8".

No. 400SC010 .....**$12.46**

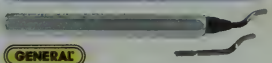
GENERAL

T-Handle Reamer

Hardened, ground-steel reamer removes burrs and enlarges small holes in soft metals, plastics and other materials. Capacity 1/8" to 1/2".

No. 400SA024 .....**$16.08**

Deburring Tools



GENERAL

Swivel Head Deburring Tool

Precision-made deburring tool with two interchangeable blades - mounted blade for deburring steel and aluminum, spare blade for deburring brass and cast iron. 5" aluminum handle.

No. 400TE010.....**$10.52**

Replacement Blades
For deburring steel, aluminum, plastic, copper
No. 400TE012.....**$2.30**
For deburring brass, cast iron
No. 400TE014.....**$2.24**

Deburring Scrapers

A. Hollow, 6-3/8" OAL.
No. 846PR062.....**$11.40**
B. Solid, 6-3/8" OAL.
No. 846PR064.....**$17.80**

GENERAL

Deburring Kit – 4 pc

Swivel head tools with 4 different blades, identifiable by color: Green for aluminum, red for brass, blue for steel, yellow for plastic. 4-3/4" plastic handle with pocket clip. **(USA)**

No. 400IE484 (484) **$14.89**

Scraper Set

Dominator® Carbon Scraper Set - 4 pc

MAYHEW TOOLS

Patented 2-composite ergonomic handle provides comfortable and secure grip. Handle capped end allows user to strike without handle damage. Shaft is hardened and tempered the entire length for maximum durability and goes through handle for additional strength. **Includes:** 1/2", 3/4", 1", and 1-1/2" carbon scraper. 5/16" square, 10" OAL.

No. 544IE0001 .....**$53.59**

Coast Flashlights

The output of COAST LED Lenser lights is measured in lumens.

COAST™ LED Lenser Lights

COAST LED Lenser measures light output for our products in Lumens because it has been generally adopted by the portable lighting industry as the most universal measurement of light output.

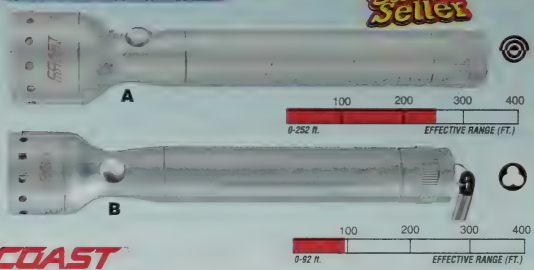
An accurate unit of measurement is especially important with flashlights and headlamps because there is a wide range in quality of light sources and optics that are used.

LED Lenser Optical Technology

Crystal Reflector Tube System	Cloverleaf Reflector System	Cloverleaf Multi-Reflector System	Prism Reflector System	Advanced Focus System
Lined with highly reflective crystals, it intensifies light output and provides a much brighter beam of light.	A broad spectrum beam of general illumination.	A diffuse beam that casts a broad shaft of light for up close work.	A highly concentrated beam that casts light over a maximum distance.	A lot to Post [illegible] beam [illegible] useable light.

Professional Use

Best Seller



COAST

10 times brighter and longer battery life than conventional flashlights!

LED Lenser® Flashlights

LED Lenser® High Performance products bring leading-edge technology to hand-held lighting. Using only the brightest, highest-quality LEDs and patented optical, electronic, and manufacturing systems, LED Lenser® High Performance lighting offers incredible light output with the energy efficiency and LED technology. **Features:** Prism Reflector System; High-intensity LED; Aluminum casing; Front ON/OFF switch; Uses AA batteries.

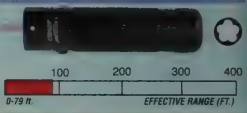
A. V2 Power Chip

TT No.	Beam	Lumens	Battery Size	Battery Life	OAL	PRICE
273IN7461	White	36	AA	10.5 Hrs	5.4"	$51.20

B. V2 Triplex

TT No.	Beam	Lumens	Battery Size	Battery Life	OAL	PRICE
273IN7547	White	21.5	AA	20 Hrs	6"	$28.80
273IN7546	Blue	21.5	AA	20 Hrs	6"	$28.80

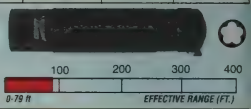
V2 6 Chip Dual Color Ultra-Violet Torch



- Utraviolet Light helps detect leaks!
- High Intensity LED, 3 White or 3 Ultraviolet Beam

TT No.	Beam	Lumens	Battery Size	Battery Life	OAL	PRICE
273IN7732	Dual	26.5	AAA	72 Hrs	3.4"	$44.00

V² Tactical Power Chip Torch



- Rear Switch (ON/OFF)
- High Intensity LED

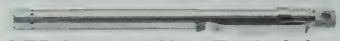
TT No.	Beam	Lumens	Battery Size	Battery Life	OAL	PRICE
273IN7736	White	141	AAA	36 Hrs	4.5"	$56.00

LED Lenser® Digitac Focus - Rechargeable

No dark spots when moving concentrated to wide beam. Runs off AC Power.

TT No.	Beam	Lumens	Battery Size	Battery Life	OAL	PRICE
273IN7853	White	110.4	Rechargeable	22 Hrs	4.1"	$88.00

LED Lenser® V16 Technician's Light



Solid focus beam great for technicians and mechanics.

- High Intensity LED, White Beam
- Twist Switch (ON/OFF)

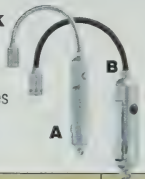
TT No.	Beam	Lumens	Battery Size	Battery Life	OAL	PRICE
273IN7526	White	2.1	BRA35	26.5 Hrs	3.9"	$13.60

General Use

COAST

LED Lenser® Flex Neck

Flex neck lights offer you the convenience of being able to put the light exactly where you need it - anywhere in a 360° range. Flex tourches feature crystal reflector tube system, high intensity LED, metal casting body and front switch.



	TT No.	Size	Lumens	Battery Size	Battery Life	Length Neck	Length Body	PRICE
A	273IN7578	Micro	2.7	AG5	35 Mins	2.7"	2"	$12.40
B	273IN7582	Small	6	AG13	74.5 Hrs	3.6"	2.4"	$14.40
	273IN7583	Medium	8.5	AAA	11 Hrs	7.2"	3.7"	$20.00
	273IN7584	Large	1.8	AA	43 Hrs	13.6	5.5	$34.40

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.

We reserve the right to correct misprints.

LED Lenser® V2 Chip Flashlights

Full size flashlights with incredible energy efficiency.

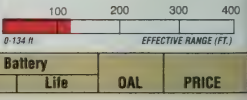
- 6 & 9 High Intensity LEDs, white beam
- Front Switch (ON/OFF)

A

B

V2 6 Chip Dual Color Flashlight

- 6 High Intensity LEDs, 5 white & 1 red
- Red beam perserves night vision

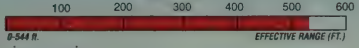


TT No.	LEDs	Lumens	Battery Size	Battery Life	OAL	PRICE
A. V2 6 Chip Flashlight						
273IN1006	6	63	AAA	118 Hrs	6.2"	$25.20
B. V2 9 Chip Flashlight						
273IN1089	9	48	C	49 Hrs	8.7"	$40.00
C. V2 6 Chip Dual Color Flashlight						
273IN1106	6	46	AAA	122 Hrs	6.2"	$30.00

Tactical Use and Headgear

LED Lenser® Power Chip Tactical Light

- Prism Reflector System
- High Intensity LED,
- Rear Switch (ON/OFF)
- Lightweight tactical Aluminum casing



TT No.	Beam	Lumens	Battery		OAL	PRICE
			Size	Life		
273IN7736TS	White	149	AAA	120 Hrs	5"	$60.00

Revolution Headlamp with VLT

Variable Light Output Technology (dimming function controls light output). Hinged attachment to position beam with adjustable elastic straps.

- Prism Reflector System
- High Intensity LED, White
- Front Switch (ON/OFF)
- Metal and Plastic casing

TT No	Beam	Lumens	Battery		PRICE
			Size	Life	
273IN7468	White	60	AAA	34 Hrs	$48.00

Pelican™ Flashlights — LIFETIME GUARANTEE

HeadsUp Lite™

Non-glare hybrid head lamp that gives you the option of using Xenon for intense bright light or 3 LEDs to conserve battery life. Lamp for hands-free lighting. 2.16" lamp on adjustable head strap. Black. Uses 3AAA alkaline batteries (included). Also includes rubber and cloth head strap.
No. 603IN2620 .....**$31.55**

New Recoil LED Technology

SabreLite™ LED

Submersible to 500 ft. 32 times brighter than standard LED. Light weight body with polycarbonate lens and ABS shroud. 35 lumens. Six hour battery time with (3) C size alkaline batteries. **(USA)**
A. No. 603IN2020 .....**$57.38**

M6 LED Lithium

Water resistant, aluminum body. 41 lumens. Tail switch provides on/off or momentary action. Safety lockout switch prevents inadvertent switching. **Includes:** Cordura® holster and (2) CR123 Lithium batteries. Black. **(USA)**
B. No. 603IN2330 .....**$77.99**

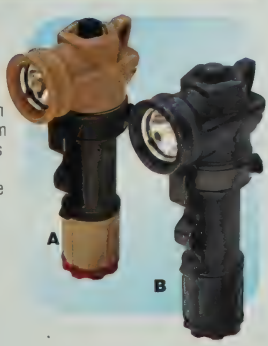
M6 Lithium

Water resistant, aluminum body. 74 lumens from Xenon bulb. Durable construction. One hour battery time. **Includes:** Cordura® holster and (2) CR123 Lithium batteries. Black. **(USA)**
C. No. 603IN2320 .....**$55.08**

Flashlights

PentagonLight™

Molle Light



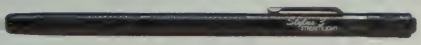
Anglehead design fits through PALS webbing for secured hands-free attachment on vests. Top position button enables operation without removing from webbing. White LED provides 40 lumens of light output and over 5,000 hours. Available with red or blue filter. Uses one AA alkaline battery. Includes rotational belt clip. 3.4" OAL

Light with red filter
A. No. 630IN101 .....**$35.00**

Light with blue filter
B. No. 630IN100 .....**$35.00**

STREAMLIGHT Penlights

Stylus™ Pen Light



This 1.1 ounce pen light throws a powerful focus beam of bright white LED lights and runs over 60 hours on 3 AAAA alkaline batteries. Its waterproof machined aluminum case has a momentary blink switch plus constant 'on'. *Lifetime Warranty.* Black **(USA)**
No. 741PR100 .....**$19.10**

Stylus™ Reach

7" flexible head added for those hard-to-reach places. 14" OAL
No. 741IN618 .....**$29.95**

High-Powered LED Penlights

Abrasion and corrosion-resistant aluminum. Waterproof. **MicroStream™** light output up to 20 lumens; up to 1.5 hrs runtime. 1.04 oz, 3.5". **Includes:** 1 AAA battery.
No. 741IN318 .....**$19.10**
Stylus® Pro light output up to 24 lumens; up to 7.5 hours runtime. 1.64 oz. 5.3". **Includes:** 2 AAA batteries and holster.
No. 741IN118 .....**$22.95**

MityLite® Laser Spot™ Flashlight

The MityLite™ Laser Spot™ is unbreakable and water resistant. 4,000 C.P. focused-beam Flashlight; 400% brighter than ordinary pocket lights *(FM, CSA, AUS, EX Approved).* **Includes:** shirt clip, Laser Spot™ lamp module, lightbender and two AAA-cell alkaline batteries. 4-3/4"OAL. **Color:** Black. *Lifetime Guarantee.* **(USA)**
No. 603LI900 .....**$11.29**
MityLite® Replacement Bulbs
No. 603AC974 .....**$4.10**

Techni-Tool® Clip-Lite

Disposable Clip-Lite

Penlight, sealed for longer life. Created to go everywhere; all purpose–extremely compact. Press clip to light. Batteries included. **(USA)**
No. 758IN017 .....**$2.25**

Flashlights and Accessories

MAG-LITE®

Mini Flashlight Sets
Don't let their size deceive you!
These rugged water and shock resistant flashlights feature: Design balanced optics and power for improved performance; High intensity spot to flood beam that maintains max candlepower from 10 to 30 feet away; Spare lamp safely secured in the tail cap; High grade rubber seals; and precision machined anodized aluminum housing. Batteries included. ***Limited Lifetime Warranty.*** **(USA)**

Best Seller

Mini MagLite® 2 Cell AAA
No. 528LI010.....**$11.75**
Mini MagLite® 2 Cell AA
No. 528LI014.....**$13.25**

Mini MagLite® 2 Cell AA Combo
Includes: Flashlight, pocket clip, wrist lanyard, red, amber, clear lens, & lens holder.
No. 528LI020.....**$15.90**

AA & AAA Replacement Lamps (2/Card)
No. 528LI026.....**$2.15**

New!

Mini-Maglite AA Black Professional Flashlight
Mini-MagLite® 2 cell AA with holster. Black.
No. 528IN201.....**$13.60**

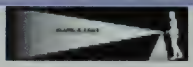
1 Watt LED Upgrade with 3 Light Settings
Switch between 100%, 50% and 25% light for floodlight and spotlight functionality. Super-bright 1-watt LED lasts for 50,000 hours. Push-button on-off tail switch includes 3 strobe settings.
No. 742IN003.....**$20.25**

LED Upgrade
LED lasts 100,000 hrs. Optional push-button on-off tail switch, no strobe settings.
No. 742IN007.....**$7.30**
LED upgrade and tail switch
No. 742IN070.....**$8.10**

LED Upgrade Bulb
Fits most D & C cell flashlights. Super bright and extends battery life. 50,000 hour life. Shock resistant.
No. 742IN005.....**$15.40**

BAYCO Utility/Work Lights

Cordless LED Flashlight/ Floodlight Worklight



Powerful handheld light is intrinsically safe (XPR-9850) and approved for use in Class I Division I C & D hazardous environments. Encased in XENOY, a non-conductive, engineered polymer especially designed to withstand chemicals. Runtime of 9 hours on full power or 18 hours at half power. Recharges in 3 hours. 6W high-density LED throws a 100' circle from 10' away. Nickel metal hydride battery pack recharges from 100 to 240 VAC, 50/60 Hz or 12 VDC. Universal charger included. **(USA)**
A. No. 629IN001 (XPR-9850) **Intrinsically Safe**.....**$349.95**
B. No. 629IN002 (NSR-9850) ***Same as above but not intrinsically safe***..**$254.90**

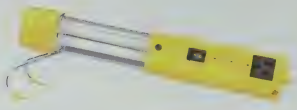
Cordless LED Flashlight/ Floodlight

66 LED version operates as 60 LED floodlight and a 6 LED flashlight. 36 LED version operates as a 30 LED floodlight and 3 LED flashlight. Water resistant.

66 LEDs (60 LED floodlight/6 LED flashlight)
No. 629IN004.....**$44.20**

36 LEDs (30 LED floodlight/6 LED flashlight)
No. 629IN003.....**$37.40**

Work light doubles as a flashlight!
Fluorescent/Spot Work Light



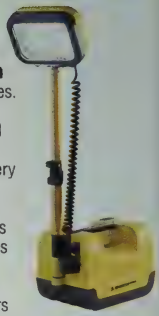
Impact resistant fluorescent work light with chemical and UV resistant lamp protector. High gloss reflector and clear polycarbonate top for spot-lighting. Convenient double hang hook allows hanging or standing. Nylon tips for scratch resistance and extra grip. **Specs:** yellow flame retardant polypropylene handle; 25' 16/3 SJT cord; polarized plug; 12A grounded receptacle; cool running 13W 10,000 hr. rated 6500K fluorescent bulb included. (Mexico)
No. 629IN935 (SL-935).....**$28.90**

PELICAN™ Lighting System

New!

PELICAN™

Remote Area Lighting System



Ideal for hard to reach places. Lightweight, easy-to-carry. Mast head rotates 360° and lets you extend light up to 32". 12V rechargeable battery gives you up to 8 hours of maximum light or 15 hours of low light and recharges is 7 hours. Polycarbonate lens in lightweight and impact-resistant. Maintenance-free LED array with 50,000 hours life. Black. ***Lifetime Warranty.***
No. 603IN9430.....**$864.00**

Batteries

DURACELL®

Preferred by law enforcement and government agencies!

Duracell Procell Batteries
Dependable, long-lasting power. Date coded. Operates reliably in temperature extremes of -20°C to 54°C. Contains no added mercury.

No. 177IN1300 (PC1300) Size: D **$1.30**
No. 177IN1400 (PC1400) Size: C.....**$1.25**
No. 177IN1500 (PC1500) Size: AA **$0.70**
No. 177IN2400 (PC2400) Size: AAA **$0.80**
No. 177IN1604 (PC1604) Size: 9V.....**$2.30**

Industrial & Alkaline Batteries

Energizer

Designed for your heavy-current or continuous-use applications. **Features:** no mercury added–special disposals not required; operates in temperatures of -30°C to 55°C.

Alkaline batteries
No. 814CH022 9V **$1.95**

Industrial alkaline batteries
No. 814CH091 AA, 1.5V.....**$0.55**
No. 814CH092 AAA, 1.5V **$0.60**
No. 814CH093 C cell, 1.5V.....**$1.10**
No. 814CH095 D cell, 1.5V **$0.95**

Battery appearance may vary from shown images!

Electronic/ Medical Batteries

Lithium batteries outlast alkaline batteries substantially in pulse oximeters and infusion pumps.Battery has a capacity of 1200 milliampere-hours; requires no "air up" time and contains no mercury, cadmium, or lead; operates in temperature extremes of -40°C to 60°C.
A. No. 814CH522 9V .....**$8.45/Ea.**
B. No. 814CH912 AA, 1.5V ..**$7.65/2Pk.**

CR123A Lithium Batteries

For use with Pentagon Lights. 3-volt. Heat tested to 212°F.
No. 630IN4000 .....**$3.95**

Extractor Sets

TECHNI-TOOL

For unscrewing the impossible!

Screw Pliers

For screws encrusted with rust, or with a damaged or unusual head. Serrated opening on jaw top lets you firmly grasp screw head and gives you more torque than a screwdriver. Also allows you to access a nut where space is limited and a spanner wouldn't fit. Both vertical and horizontal serration inside jaw. 6" OAL. (Japan)

No. 758PL055 .....**$25.20**

ALDEN CORPORATION

Quickly and efficiently remove broken bolts, screws and damaged screws

Drill-Out® Set – 6 pc

Includes six high-quality extractors and removers for use with your 3/8" variable speed reversible drill. To remove damaged screws, simply apply pressure and operate in reverse mode (2 damaged screw removers). Broken bolts/screws are removed with drill bit and extractor in one tool (4 extractors). Self-centering, drills up to and including grade 8 or 10.9 Class bolts. Includes storage case. **(USA)**

Extractors: #10, 1/4" flip-style; 5/16", 3/8" regular style. Removers: #6-#8, #8-#10.

No. 136IE620 (6207P).....**$41.25**

X-Out® Damaged Screw Remover Set – 3 pc

Use a hand drill or insert X-Out® into a standard 3/8" variable speed power drill, set for reverse mode. For screws #6-14.

No. 136IE3019 (3019).....**$24.95**

S-K PROFESSIONAL TOOLS

Remove any damaged fastener fast!

New!

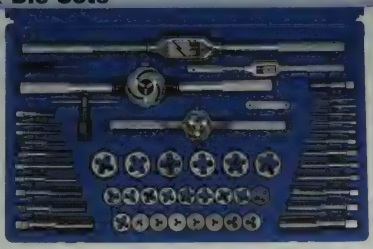
1/4" Drive TuroboSockets® Set - 16 pc

Removes slotted and Phillips head screws too tight for a screwdriver. Also removes screws, nuts and bolts with thin, rounded or tapered heads. **Includes:** 1/4"; 9/32"; 5/16"; 11/32"; 3/8"; 6mm; 6.5mm; 7mm; 7.25mm; 7.75mm; 8.25mm; 8.50mm; 9mm; 9.25mm; 10mm sockets supplied on a rail.

No. 690IE756.....**$170.57**

Tap & Die Sets

IRWIN. HANSON.



53-pc Machine Screw/ Fractional Tap and Hex Die set

5 machine screw plug taps and 1" hexagon dies from 6 – 32 NC to 12-24 NC; 10 fractional plug taps and 1" hexagon dies from 1/4" - 20 NC to 1/2" – 20 NF; 6 fractional plug taps and 1-7/16" hexagon dies from 9/16" – 12 NC to 3/4" – 16 NF; 2 pipe thread plug taps and 1" hexagon dies sizes 1/8" – 27 NPT and 1/4" – 18 NPT; 5 threading tools; pitch gauge; plastic case.

No. 426FI940.....**$286.54**

53-pc Metric Tap & Hex Die Set

15 metric plug taps and 1" hexagon dies from 3mm – 0.50 to 12mm – 1.75; 6 metric plug taps and 1-7/16" hexagon dies from 14mm – 1.50 to 18mm – 2.50; 2 pipe thread plug taps and 1" hexagon dies sizes 1/8" – 28 BSP and 1/4" – 19 BSP; 5 threading tools, pitch gauge, plastic case.

No. 426FI294.....**$308.88**

41-pc Metric Tap and Hex Die Set

6 metric plug taps and 5/8" hexagon dies from 3mm - .050 to 6mm – 1.00; 10 metric plug taps and 1" hexagon dies from 7mm – 1.00 to 12mm – 1.75; pipe thread plug tap and 1" hexagon die 1/8" – 28 BSP; 5 threading tools; pitch gauge; plastic case.

No. 426FI030.....**$154.19**

39-pc Machine Screw/Fractional Tap & Solid Round Die Set

6 machine screw plug taps and 1" hexagon dies from 4-40 NC to 12-24 NC; 10 fractional plug taps and 1" hexagon dies from 1/4" – 20 NC to 1/2" – 20 NF; pipe thread plug tap and 1" hexagon die size 1/8" – 27 NPT; 3 threading tools; pitch gauge; plastic case.

No. 426FI028 ..... **$137.23**

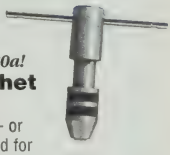
IRWIN. HANSON.

Tap & Drill - 13 pc

Six HSS wire gauge drill bits sizes 7 thru 35. Six plug taps sizes 6-32NC thru 1/4-20NC. T-Handle tap wrench.

No. 426FI038.....**$25.39**

GENERAL



Conforms to GGG-W-680a!

Reversible Ratchet Tap Wrenches

Ratchet can be set for right- or left-hand operation or locked for non-ratchet use. Self-centering hardened tool steel jaws and knurled chuck sleeve provide positive grip on taps, reamers and small tools. Sliding T-handle for fitting into tight spaces with operator leverage.

No. 400IE161 (161R) **$31.38**

KLEIN TOOLS

Cushion Grip Triple Taps and Six-In-One Tap Tool

Quickly forms new threads, re-forms burred threads, cleans out plaster. Each tap size rethreads to next larger size.

Triple Tap, 6-32, 8-32, 10-32, 7-3/4" OAL

No. 490IE623 .....**$15.70**

6-in-1 Tap, 6-32, 8-32, 10-32, 10-24, 12-24, 1/4-20, 7-3/4" OAL

No. 490IE626 .....**$25.30**

GREENLEE

Drill/Tap Set - 6 pc

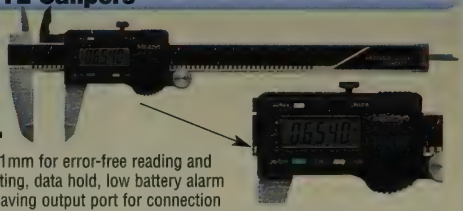
6-32 to 1/4-20 set. For taping mild steel, copper, brass or aluminum. **Specs**: Material thickness: 10 gauge; Shank: 1/4" quick change hex; Drill material: hardened high speed steel; Drill point - split point with web thinning.

No. 414IE001.....**$44.31**

Mitutoyo ABSOLUTE Calipers

Provides a digital readout for error-free reading!

Best Seller



ABSOLUTE Digimatic Calipers - 6"

Provides a digital readout to .0005"/0.01mm for error-free reading and can measure steps. Functions: zero-setting, data hold, low battery alarm and data output. Provided with a data saving output port for connection with the SPC system. Powered by a single SR-44 battery. Battery life: approx. two years under normal use. **Specs:** All metal head with plastic housing. Range: 0-6"/0-150mm; LCD resolution: .0005"/0.01mm; Accuracy: ±.001. **Without SPC output; with thumb roller**

No. 575GA196 .....**$141.00**

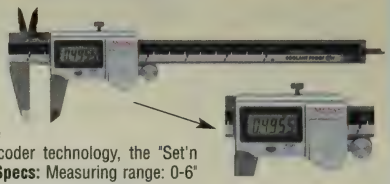
ABSOLUTE Digimatic Tool Kit - 6"

Includes: Digimatic micrometer (Friction Thimble Type), Range: 0-1", LCD Resolution: .00005"; Digimatic caliper, Range: 0-6", LCD Resolution: .0005"; and a mahogany case.

No. 575GA940 (950-940-9).....**$354.00**

The world's first digital caliper sealed against fluids and contaminants!

New!



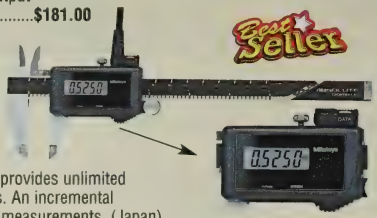
ABSOLUTE Coolant-Proof Caliper - 6"

Now you can take digital measurements in places you never could before. Coolant-proof, dust-proof, and chip-proof. Use it anywhere in the shop. Includes Mitutoyo's patented absolute encoder technology, the "Set'n Forget" origin set up feature. Large LCD display. **Specs:** Measuring range: 0-6" (0-150mm); LCD resolution: .0005" (0.01mm); Accuracy: ±.001"; Rating: IP-67.

With SPC output
No. 575IE6210.....**$215.00**

Without SPC output
No. 575IE5210.....**$181.00**

Best Seller



ABSOLUTE Solar Calipers

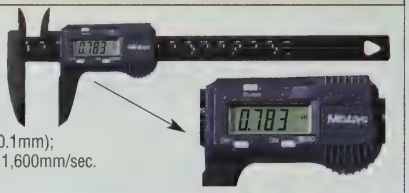
There's no risk of a dead battery with these digimatic solar powered calipers, which are powered by solar panels that work in as little as 60 Lux. The absolute encoder feature eliminates the need for zero setting each time the caliper is turned on. Plus, the Absolute scale provides unlimited response speed that eliminates over-speed errors. An incremental measurement function is built-in for comparison measurements. (Japan)

Range: 0-4" (0-100mm); LCD Resolution: .0005" (0.01mm); Accuracy: ±.001"; Remarks: .075" round depth bar with SPC output
No. 575IE0463 .....**$225.00**

Range: 0-6" (0-150mm); LCD Resolution: .0005" (0.01mm); Accuracy: ±.001"; Remarks: with SPC output
No. 575IE0464 .....**$264.00**

Accessories
SPC connecting cable: 1m
No. 575IE9149.....**$43.65**
SPC connecting cable: 2m
No. 575IE9150.....**$48.90**

Mitutoyo



Digimatic Plastic Caliper

Plastic jaws won't mar surface. **Features:** 4-digit LCD, power ON/OFF, zero setting, in/mm conversion and low battery alarm.
Specs: 6" (10-150mm) range; Resolution: .001" (0.1mm); Accuracy: ±.008/±0.2mm; Max. response speed: 1,600mm/sec.

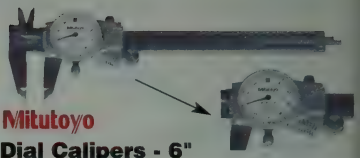
No. 575IE126 .....**$45.35**

Pocket Caliper

GENERAL

Make quick inside and outside diameter measurements with this pocket-size stainless steel caliper. Shows both metric (mm) and inches (32nds) and decimal equivalents. 3" capacity. **(USA)**

No. 400IE132 (132me) **$10.93**

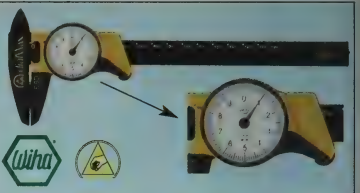


Mitutoyo

Dial Calipers - 6"

Slider displacements are amplified by a rack-and-pinion mechanism and indicated on the dial. The sharp jaw edges provide easy access to portions that ordinary calipers can not measure. Can measure steps. Features an extra-rigid main beam. Includes case. **Specs:** All metal head with plastic housing. Range: 0-6"; Resolution: .001"; Range/Rev.: .10"; Acc: ±.001"; Dial Face: B.

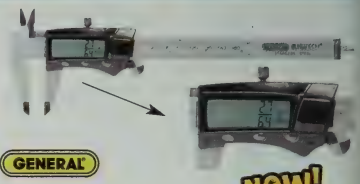
No. 575GA637 .....**$112.00**



ESD-Safe Dial Caliper

First ever non-metallic ESD-safe caliper. 60% fiber glass content. Impact-resistant dial can be recalibrated to zero. 6" OAL (Germany)

No. 881IE1105 .001" Reading **$50.94**
No. 881IE1106 0.1mm Reading.....**$50.94**



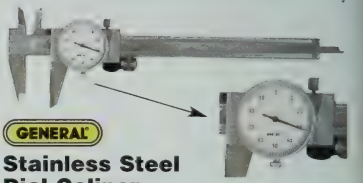
GENERAL

New!

Digital Fractional Caliper

The high-contrast digital display easily switches between inches, millimeters and fractions, with guaranteed accuracy to 0.001". Rugged stainless steel design delivers accurate readings of inside, outside, step and depth measurements. Includes foam padded plastic case for safe storage. **Specs:** 6" Stainless Steel; Tri-Mode digital display in inches, millimeters, and fractions with auto on/off to preserve battery life; Bar scale graduated in inches and millimeters; Extendable depth gage for use in slots and small holes.

No. 400IE147 .....**$48.11**

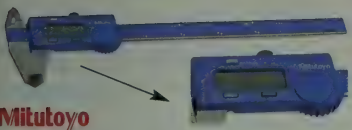


GENERAL

Stainless Steel Dial Caliper

Inside, outside, depth and step measurements from 0" to 6". Hardened stainless steel with etched graduations on rigid .125 thick beam, accuracy to 0.001". Adjustable bezel. 1-1/2" dia. dial with .100" per 1 full revolution. Measuring jaw-locking screw.

No. 400IE107 .....**$46.63**

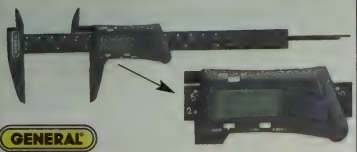


Mitutoyo

MyCal-Lite Digital Caliper - 6"

Large LCD digits ensure error-free reading in either inch or mm mode. Zero point can be set anywhere. **Specs:** All metal head with plastic housing. Measuring Range: 0 to 6" (0 to 150mm); LCD Resolution: .001" (0.1mm); Acc (20°C): ±.005" (±0.2mm); Response Speed: 63"/s; Battery: Silver oxide cell; Battery Life: approx. two years; Display: LCD 4-digit (-) sign; Alarm: battery voltage low, over speed.

No. 575GA113 .....**$104.00**

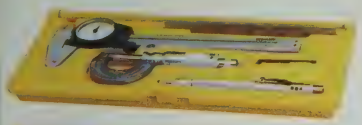


GENERAL

Direct Read Digital Caliper - 6"

This fiberglass-reinforced, super polyamide, digital caliper features accurate digital measurements in both inches and metric, direct reading 0.001"/0.1mm, Adjustable 0, and Friction thumb roller. Swiss precision crafted.

No. 400GA143 .....**$94.57**



GENERAL

Precision Measuring Kit - 4 pc

Four essential tools for measuring and marking. **Includes:** 0 to 1" micrometer; 0 to 6" thousandths reading dial caliper; 6" rigid stainless steel rule graduated in 8ths, 16ths, 32nds, and 64ths; tungsten carbide scriber with magnetic pickup. Packaged in fitted, blow-molded case. **(USA)**

No. 400IE004 (S004).....**$97.43**

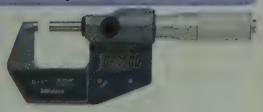
Wiha New!

Digital Caliper DigiMax

5 digit digital display with 7.5 mm numeral height for easy reading. For outside, inside, depth and step measurements. Automatic on and off. Zero setting possible in every position for quick comparison measurements. Non-metallic. **Specs:** Reading: 0.0005", 6"; Reading: 0.01mm, 150 mm.

No. 881IE1101 .....**$88.44**

Micrometers/Indicators



Great Seller

Mitutoyo

Coolant Proof Micrometers - 1"

Lightweight design and digital display allow measurements to be taken with the micrometer held in one hand. **Features:** two measuring modes–ABS (absolute) and INC (incremental)–for efficient measurement (with SPC output model). **Functions:** origin setting, inch/mm selection, zero-setting, data hold, error alarm, auto-sleep, data output. Can be linked to the SPC system. Range: 0-1" (0 – 25.4mm). **With SPC output; ratchet stop**

No. 575GA130 .....**$207.00**

A large, easy-to-read LCD!

Mitutoyo

Quick-Mini Micrometer - 0.5"

This Micrometer is a fast, yet accurate, way to check thickness and simple dimensions with ease. Great for thin wires, glass, ceramic, pin gauges and more. A large, easy-to-read LCD displays your measurements in either inch or metric formats. **Specs:** Measuring Range: 0.5"/12mm; Resolution: .0005"/0.01mm ±0.01"; Max. Response Speed: 1,600mm/sec.; Alarm: battery voltage low, over speed.

No. 575GA118 .....**$103.00**

Mitutoyo

ABSOLUTE Digimatic Indicator ID-S

Large LCD with .335" digits for easy reading. **Functions include:** origin, inch/mm, ± direction and on/off. **Specs:** Measuring Range: 0 to .5" (0 to 12.7mm); LCD Resolution: .0005/0.01mm; Acc (20°C): .0008" (0.02mm); Measuring Force: 1.4N or less.

No. 575GA683 (543-683).....**$153.00**

Gauges

GENERAL

Cortland Feeler Gauges

Tempered steel blades of exacting tolerances. Size etched in decimals for inch and millimeters. Range: .0015 - .025 **(USA)**

No. 400PR052.....**$9.06**

Plastic Thickness Gauge

Includes:
Amber: .001"/.025mm;
Purple: .0015"/.038mm;
Red: .002"/.051mm;
Green: .003"/.076mm;
Tan: .004"/.102mm;
Blue: .005"/.127mm;
Matte: .0075"/.191mm;
Brown: .010"/.254mm; Black: .0125"/.318mm;
Pink: .015"/.381mm; Yellow: .020"/.508mm;
White: .025"/.635mm; Coral: .030"/.762mm. **(USA)**

No. 656GA095 5" Fan Blade.....**$33.18**

Bubble Levels

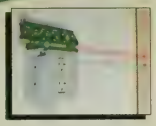
Level

True Blue™ blue-liquid vials are accurate to 0.00050" per inch in all 10 level and plumb working positions. Magnetic edge for strong holding power. Heavy-duty aluminum frame. ***Lifetime Warranty.***

Specs: 9" heavy-duty torpedo level. Vials read plumb, level, 45°. Heavy-duty extruded aluminum frame; V-grooved working edge fits on pipe or conduit.

No. 351IE819 .....**$11.98**

GREENLEE



Mini-Magnet Laser Level

Combines "no-dog" features with a laser. Help align conduit, electric panel boxes, plumbing cabinets and more. **Features:** Three rate-earth magnets, compact size. Range over 80 yards. 4-vial design (0°, 90°, 45°, 30°); V-groove on top for easy view of vials. Dimensions: 5.63" L X .75" W X 1.81" H.

No. 414IE097 .....**$95.50**

GREENLEE

Electrician's Magnetic Torpedo Level

Professional grade level for aligning conduit, checking clearance for runs and more. Four magnets allow for hands-free use on metal surfaces. Four open vial ports assure easy viewing at 0°, 30°, 45° and 90° angles. V-groove on top for easy view of vials. Aluminum alloy. 8-1/2"L X 3/4" W X 1-1/4"H.

No. 414IE107 .....**$41.59**

GREENLEE

Compact Magnetic Bubble Level

Versatile, mini torpedo design with "no-dog" attachment makes bending offsets a breeze. **Features:** Three earth magnets for attaching to pipes; Four vial design: 0°, 90°, 45°, and 30°; Aluminum alloy; V-groove on top for easy view of vials; Bending offsets and calculations engraved on level. Dimensions: 5-1/2"L x 3/4"W x 1-1/2"H.

No. 414IE077 .....**$38.50**

Measuring Tapes

Lufkin®

A. 700 Series 25' Tape Measure

1" x 25' tape with autolock and magnetic end hook for easy one-person measuring. Orange ABS case and yellow blade provides strength and visibility. Recessed lock release reduces chance of accidental retraction.

A. No. 272IE726 .....$9.98

B. 16', 25' or 30' Pro Series Power Return Tape

Ny-Clad, blade coating extends life 5 times longer than standard. Patented end hook lasts 10 times longer than ordinary end hooks. Non-slip toggle lock allows complete control of power tape blade. Rubber cushion shell protects tape from impact and improves grip. Compact size, removable belt clip.

No. 272IE3430 1" x 30' $15.09
No. 272IE3425 1" x 25' $14.48
No. 272IE3316 3/4" x 16' $12.34

C. 25' Quikread Power Return Tape

Vertically numbered tape measure has graduations printed in fractions and decimal equivalents. **(USA)**

No. 272PR142 1"W x 25'L (Shown) $11.31
No. 272IE1312 3/4"W x 12'L (Not shown) $7.36

D./E./F. 10' & 25' Power Return Tape

Automatic power tape, red and black markings on a yellow background. **(USA)**

D. No. 272GA125 Yellow Tape 1" x 25' $13.79
E. No. 272PR116 Yellow Tape 1/2" x 10' $6.61
F. No. 272PR325 Orange Case 3/4" x 25' $10.46

D & F - tape style

E - tape style

G. 25' Power Return Measuring Tape

New blade design achieves 10' stand-out making long measurements easier. **Features:** Soft touch lock button; Non-slip slide lock for positive blade locking; 25', 1-3/16" blade with riveted end hook; Belt clip. Yellow blade in orange case.

Dual scale Engineer's blade - 1/16 gradation 1/10/100 top, feet/inches bottom
G. No. 272IE8525.....$11.94

Single scale blade - 1/16" gradation, 16" O.C.
No. 272IE8526 (Not Shown) $11.94

H. Mezurall® Combo Metric/English

1/2" (13mm) x 3m/10' long bi-tape. Chrome case and A11 blade style. **(USA)**

H. No. 272PR104 .....$11.15

KLEIN TOOLS

One Hand Operation!

I./J. Magnetic End, Measuring Tape

Large magnetic dual-end hook sticks to ferrous metals for easy one person measuring. Double sided markings. Positive blade lock. 1" wide.

No. 490IE9186 (16') $17.20
I. No. 490IE9185 (25') $20.95

Same as above with single end hook single blade marking
J. No. 490IE916 (25') $20.10

K. Auto-Lock™ 25' Tape Measure

IDEAL

Nylon coated tape for durability. Impact resistant ABS with comfortable molded rubber grip and built-in rubber bumper to protect blade end. Automatic blade lock and push-button retrieval.

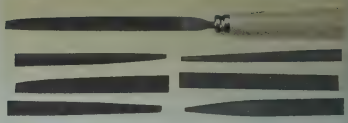
K. No. 462IE242 .....$14.90

Swiss Pattern Files

Swiss Needle File Set - 3 pc

Precision Swiss pattern files in flat, triangular and round styles. Sturdy plastic handles. (Switzerland)

No. 351IE207 .....$6.52

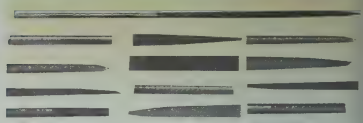


C.K

Wooded Handle File Set - 6 pc

High-quality, file assortment. With comfortable wooden handles for good grip; 4-1/8" blades for practical use. Set consists of flat, round, 1/2 round, square, 3-square, & hand file shapes. (Germany)

No. 217FI120 6-3/4" OAL $30.01



Field Service File Set – 12 pc

A set of 12 needle tiny files for fine work. Perfect for use in your tool kit. Imported. 4" OAL.

No. 784FI014 .....$12.30

Nicholson®

Swiss Pattern Needle File Sets – 12 pc

Swiss pattern files in a variety of shapes for all your needs. Round knurled handles. **Styles:** barrette, equaling, flat, marking, joint, knife, half-round, round, slitting, square, three square, crossing. Includes plastic pouch. *Most popular styles listed and sold separately.*

TT No.	Style	Cut No.	OAL	PRICE
272IE392	12 pc (listed above)	0	5-1/2"	$134.56
272IE755	12 pc (listed above)	0	6-1/4"	$145.02
272FI264	12 pc (listed above)	2	5-1/2"	$134.56
272FI286	Flat	0	5-1/2"	$11.06
272FI288	Flat	2	5-1/2"	$11.06
272FI272	Round	2	5-1/2"	$11.06
272FI320	3 Square	2	5-1/2"	$11.06

Swiss Pattern Files

Diamond Needle File Sets - 6 pc

Your six-piece set has one each of equalling, barrette, half round, three square, round and square. 5-1/2" OAL. **(USA)**

Coarse Grit (100 grit)
No. 734IE107 .....**$53.43**

Medium Grit(170 grit)
No. 734IE108 .....**$49.60**

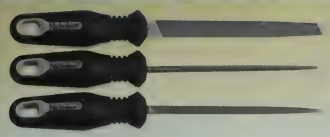
Fine Grit (130 grit)
No. 734IE109 .....**$49.60**

American Pattern Files

Nicholson® ERGONOMIC DESIGN

Ergonomic File Sets

Rubber-coated ergonomic handles for better comfort and control.

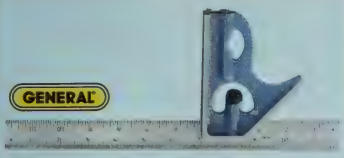


Ergonomic File Set – 3 pc

Includes: Mill bastard file, half-round bastard file, round bastard file and pouch. 6" (150mm) OAL.
No. 272IE015 .....**$21.63**

Ergonomic File Set – 5 pc

Includes: 6" (150mm) slim taper file; 8" (200mm) flat bastard file; 8" (200mm) mill bastard file; 10" (250mm) mill bastard file; 10" (250mm) half-round bastard file; pouch.
No. 272IE2040 .....**$42.35**



GENERAL

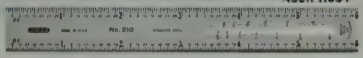
Combination Squares

12" x 1" satin chrome finish steel blade Front graduated in 8ths and 16ths, back in 16ths and 32nds. Cast iron head machined and enameled, has hair-line level and scriber.
No. 400PR150 .....**$47.41**

Stainless Steel Rulers

GENERAL

Economy Steel Rules



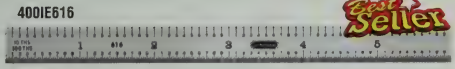
Our Economy Steel Rules are ideal for a variety of home and office uses. Each rule is 6" in length and is offered in five distinct sets of Metric and English graduations. In addition, several of our Economy Steel rules are equipped with pocket clips for use in the field.

TT No.	Model	Size	Side 1	Side 2	Width	PRICE
6" Precision Steel Rules						
400PR068	300/1*	6" Flex	32nds, 64ths	Dec. Equiv.	15/32"	$2.82
400PR070	300mm*	150mm Flex	1mm, .5mm	---	15/32"	$2.73
400IE300	300me*	6" Flex	1mm, 64ths	Metric Equiv.	15/32"	$3.02
400PR072	301/1*	6" Flex	32nds, 64ths	---	1/4"	$2.16
400PR074	301me	6" Flex	1mm, 16ths	---	1/4"	$2.04
400PR076	305me	6" Flex	1mm, 16ths	---	15/32"	$2.64
400PR084	310	6" Flex	32nds, 64ths	B&S Wire Gage	3/4"	$4.42

*Includes Pocket Clip

GENERAL

Industrial Steel Rules



Our Industrial Steel Rules are built to withstand the rigors of day-to-day use in the field. Available in 6", 12" and 18" lengths, these high-quality rules feature etched black graduations for easy reading and long life. Choose between polished stainless steel and satin chrome finishes.

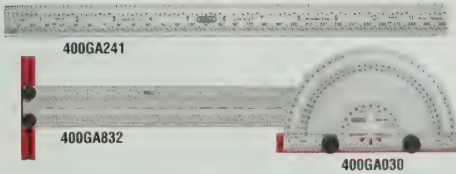
TT No.	Model	Grad Type	Size	Side 1	Side 2	Width	PRICE
6" Precision Steel Rules							
400IE616	616	5R	6" Flex	10ths, 100ths	32nds, 64ths	15/32"	$5.09
400IE634	634	4R	6" Flex	8ths, 16ths	32nds, 64ths	15/32"	$5.19
400PR122	676	4R	6" Flex	8ths, 16ths	32nds, 64ths	3/4"	$6.10
400PR124	678med	-	6" Rigid	1mm, .5mm	10ths, 20ths, 50ths, 100ths	3/4"	$6.04
12" Precision Stainless Steel Rules							
400PR022	1201me	-	12" Flex	16ths, 32nds, 64ths, 1mm, .5mm	8ths, 16ths, 32nds, 64ths	7/8"	$8.48
400GA203	1203me	-	12" Flex	1mm, .5mm	32nds, 64ths	15/32"	$8.36
400PR026	1216	5R	12" Flex	10ths, 100ths	32nds, 64ths	15/32"	$10.42
6" and 12" Precision Satin Chrome Stainless Steel Rules							
400IE0616	CF616	5R	6" Flex	10ths, 100ths	32nds, 64ths	15/32"	$7.63
400IE678	CF678med	-	6" Flex	1mm, .5mm	10ths, 20ths, 50ths, 100ths, 16ths, 32nds, 64ths	3/4"	$9.24
400PR198	CF1216	5R	12" Flex	10ths, 100ths	32nds, 64ths	15/32"	$13.34
400PR127	CF1227me	-	12" Rigid	32nds, 64ths	1mm, .5mm	1"	$19.59

TYPE OF GRADUATIONS

3R Graduation – 32nds, 64ths, 10ths, 50ths.
4R Graduation – 8ths, 16ths, 32nds, 64ths.
5R Graduation – 32nds, 64ths, 10ths, 100ths.
16R Graduation – 32nds, 64ths, 50ths, 100ths.
METRIC ENGLISH – 32nds, 64ths, 0.5mm, mm

GENERAL

ULTRA RULE™ Stainless Steel Rules



Take accuracy to a new level with ULTRA RULE™ Stainless Steel Marking Rules. These high-precision tools feature micro-fine marking holes at every scale position on the rule, allowing you to place your mark with zero uncertainty. We offer UltraRule Marking Rules in 6" and 12" lengths, as well as a 12" T-Rule and a protractor. Includes a 0.5mm mechanical pencil.

TT No.	Model	Description	Graduations	Width	PRICE
6" Precision Steel Rules					
400GA030	30	6" Flexible Protractor	Degrees, 1/2 Degrees, 32nds	3-7/8"	$37.47
400PR641	641	6" Flexible Marking Rule	32nds, 1mm	7/8"	$8.92
400GA832	832	12" Flexible T-Rule	16ths, 32nds, 64ths	2"	$38.06
400GA241	1241	7- 12" Flexible Marking Rule	32nds, 1mm	7/8"	$16.86
400GA242	1242	12" Flexible Marking Rule	32nds, 10ths	7/8"	$18.50

TECHNI-TOOL

Special Value

A. 6 Point SAE/Metric - 50 pc

Set Includes: 1/4" Drive SAE Standard Sockets: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2". **3/8" Drive SAE Standard Sockets:** 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8". **1/4" Drive Metric Standard Sockets:** 4mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm. **3/8" Drive Metric Standard Sockets:** 8mm, 9mm, 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 16mm, 17mm, 18mm, 19mm.
3/8" Drive SAE Deep Sockets: 3/8", 7/16", 1/2", 9/16".
3/8" Drive SAE Spark Plug Sockets: 5/8", **1/4" Drive 2" Extension, 3/8" Drive, 3" Extension, 1/4" Drive Ratchet, 3/8" Drive Ratchet, 1/4" Drive - 6" Driver Handle, Zippered Case** (Taiwan)
No. 758IE008 .....**$59.00**

B. Deluxe 6 Point SAE/Metric – 50 pc

Set Includes: 1/4" Drive SAE Standard Sockets: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"; **3/8" Drive SAE Standard Sockets:** 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8"; **1/4" Drive Metric Standard Sockets:** 4mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm; **3/8" Drive Metric Standard Sockets:** 8mm, 9mm, 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 16mm, 17mm, 18mm, 19mm; **3/8" Drive SAE Deep Sockets:** 3/8", 7/16", 1/2", 9/16"
3/8" Drive SAE Spark Plug Sockets: 5/8"; **1/4" Drive 2" Extension, 3/8" Drive 3" Extension, 1/4" Drive Ratchet; 3/8" Drive Ratchet, 1/4" Drive - 6" Driver Handle, Zippered Case (USA)**
No. 758IE750 .....**$94.00**

1/4" Drive Socket Set - 14 pc

Includes: 6 Pt. Sockets: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"; 2" Extension; 6" Extension; Spinner Handle; Ratchet; Black Zipper Case. **(USA)**
No. 758IE501 (Shown).....**$34.95**
Metric Version
No. 758IE0602 .....**$32.75**

1/4" & 3/8" Drive Socket Set - 23 pc

Includes: 1/4" Dr. 6 Pt. Sockets: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2" **3/8" Dr. 6 Pt. Sockets:** 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"; 3" Extension; 6" Extension; 1/4" Spinner Handle; 3/8" Ratchet; Adapter: 3/8"F x 1/4"M; Black Zipper Case. **(USA)**
No. 758IE701.....**$65.65**

1/4" Drive Socket Set - 14 pc

Contains: 6 pt. sockets: (3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"); 3" and 6" extensions; Ratchet; Spinner Handle; Metal box. **(USA)**
No. 758IE5011 (Shown).....**$30.35**

Metric Version
No. 758IE0601 .....**$34.95**

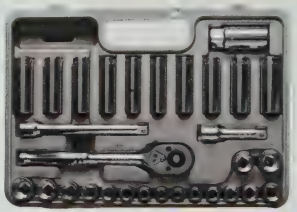
Special Value 1/4" Drive - 6 Point SAE/Metric - 22 pc

Set Includes:
1/4" Drive SAE Standard Sockets: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2". **1/4" Drive Metric Standard Sockets:** 4mm, 5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm, 12mm.
1/4" Drive 3" Extension, 1/4" Drive 6" Extension 1/4" Drive Ratchet, 1/4" Drive - 6" Driver Handle, Metal Case (Taiwan)
No. 758IE015 .....**$20.00**

Crescent

3/8" Drive Socket Set - 30 pc

Made from professional quality chrome vanadium: 3/8" drive ratchet handle; 6" extension; 3" extension; 13/16" spark plug socket; Metric sockets: 9, 10, 12, 13, 14, 15, 17, 19; SAE sockets: 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4"; Deep Metric sockets: 12, 13, 14, 16, 17; Deep SAE sockets: 7/16", 1/2", 9/16", 5/8", 11/16"
No. 272IE030 .....**$36.64**

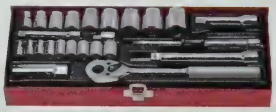


MEETS A.N.S.I. LOAD SPECS

Wright Tool

1/4" & 3/8" 6/12 Point Drive Fractional Socket Set - 26 pc

1/4" Drive includes: Nine 6 pt. Sockets (3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"); 3" extension & spinner. **3/8" Drive includes:** Nine 12 pt. sockets: (3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8"); 3" & 6" extensions; 5/8" spark plug socket; Adapter 3/8" F x 1/4" M; Ratchet; & Metal Box. **(USA)**
No. 868WR033.....**$92.10**



Crescent

R² Rapid Wrench Adjustable Socket Wrench

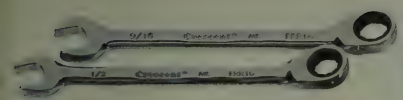
It's like 38 socket wrenches in one tool!

1/4" to 7/8" jaw capacity replaces 38 socket sizes and works on many different types of fasteners. **Features:** New wider dial for easier and tighter jaw adjustments; Serrated jaws adds gripping power and reduced slippage; Thumb recesses for superior grip; New Ergonomic and longer grip for increased comfort and torque; Precision cast steel jaws machined for smooth operation and long life; 60-tooth ratcheting mechanism requires just a six degree swing to turn fasteners; Works on standard, SAE and metric fasteners.
No. 272IE280 .....**$25.15**

CRAFTSMAN

1/4" & 3/8" Drive Standard/Metric Socket Wrench Set – 32 pc

Includes: QR ratchet; 3" extension bar; 3/8"M-1/4"F adapter; 1/4" drive sockets: 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2", 4mm, 5mm, 6mm, 7mm, 8mm, 9mm, 10mm; 3/8" drive sockets: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 10mm, 11mm, 12mm, 13mm, 14mm, 15mm; 5/8" spark plug socket.
No. 452IE4740 .....**$48.65**



Ratcheting Head

Crescent

Best Sellers

Reversible Ratcheting Combination Wrenches

Ratchet reverses with a push of a button. Ratcheting end is offset 15°, providing a better grip. 72-tooth ratchet mechanism turns fasteners with just a 5° swing vs. 30° needed for standard wrenches. (Taiwan)

SAE – 4 pc set: 3/8", 7/16", 1/2", 9/16"
No. 272IE004 (FRR4) **$40.13**

SAE – 7 pc set: 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 3/4"
No. 272IE007 (FRR7) **$78.51**

Metric – 4 pc set: 10mm, 12mm, 13mm, 15mm
No. 272IE040 (FRRM4) **$41.44**

Metric – 7 pc set: 8mm, 10mm, 12mm, 13mm, 14mm, 15mm, 18mm
No. 272IE070 (FRRM7) **$78.86**

CRAFTSMAN

Craftsman Combination Wrenches

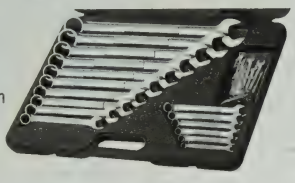
Easy-to-clean fully polished keeps tools looking great. Headlock® box-ends spread turning force throughout entire head of nut or bolt, won't round off corners. Hot-forged, heat treated to exceed ANSI specifications for strength and tolerance. **(USA)**

Professional Stubby Combination Wrench Sets – 11 pc

Standard: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1".
No. 452IE4138 .....**$101.80**

Metric: 10mm, 12mm, 13mm, 14mm, 15mm, 17mm, 18mm, 19mm, 20mm, 21mm, 22mm.
No. 452IE4139 .....**$101.78**

Combination Wrench Sets – 26 pc



Forged from tough alloy steel, heat treated, oil-quenched and tempered for a uniform hardness and maximum strength. Nickel-chrome plated to resist rust and corrosion, and to simplify cleaning.

Standard
Combination: 1/4", 5/16", 11/32", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 15/16", 1", 1-1/16", 1-1/8"; Combination Ignition: 5/32", 3/16", 13/64", 7/32", 15/64", 1/4", 9/32", 5/16", 3/8", 7/16".
No. 452IE6935.....**$113.55**

Best Seller

Metric
Combination: 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22mm; Combination Ignition: 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11mm.
No. 452IE6936.....**$113.55**

Professional 12 Pt. Full Polish Combination Wrenches - 10 pc

Standard set includes: 7/16", 1/2", 9/16", 5/8", 11/16", 3/4, 13/16", 7/8", 15/16", 1", roll-up pouch
No. 452IE1622 .....**$155.40**

Metric set includes: 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 16mm, 17mm, 18mm, 19mm, roll-up pouch
No. 452IE1624 .....**$166.43**

Moody

English/Metric Mini Open End Wrench Set – 16 pc

Hardened steel blades and nickel-plated ball end handles. Ballistic Nylon roll. **Includes:** Metric: 2.5mm, 3.0mm, 3.2mm, 4.0mm, 5.0mm, 5.5mm, 6.0mm, 7.0mm; English: 5/64", 3/32", 7/64", 1/8", 5/32", 3/16", 1/4", 5/16".
No. 580IE0122 .....**$66.95**

Adjustable Wrenches

TECHNI-TOOL

Cushion Grip Adjustable Wrenches

High quality at an affordable price. Drop forged, no-glare satin finish, inch scale on head, blue cushion grip dipped handle. ***Lifetime Warranty.*** (Taiwan)

TT No.	Size	Cap.	PRICE
758IE041	4"	9/16"	$7.75
758IE042	6"	7/8"	$8.10

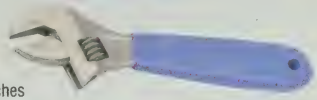
TT No.	Size	Cap.	PRICE
758IE043	8"	1"	$9.45
758IE044	10"	1-1/4"	$10.75
758IE045	12"	1-1/2"	$14.75

SAVE 29% on 5 pc set

5 pc Adjustable Wrench Set – Includes: 4", 6", 8", 10", 12" and pouch.
No. 758IE046 Reg. ~~$50.80~~.....**SPECIAL $36.05**

TECHNI-TOOL

Adjustable Wrench



Premium quality adjustable wrenches are precision crafted from high strength alloy. 6" OAL. **(USA)**
No. 758WR9006 Reg. ~~$19.30~~.....**SPECIAL $14.50**

Crescent

RapidSlide™ Adjustable Wrench

Features: Ingenious slide button mechanism in handle provides smooth, fast and accurate adjustment; big 1" jaw capacity for maximum versatility; Wide handle for increased leverage; Debris shield protects slide mechanism. Made of forged steel with chrome finish to resist rust and corrosion. SAE/metric size indicator on jaw.
No. 272IE600 6" OAL **$14.38**
No. 272IE800 8" OAL **$16.18**
No. 272IE1000 10" OAL **$23.70**

Best Seller

Crescent

Chrome plated, drop forged and heat treated for toughness and durability. **(USA)**

Red Cushion Grip			
TT No.	Size	Cap.	PRICE
272WR028	4"	1/2"	$16.64
272WR032	6"	15/16"	$16.83
272WR036	8"	1-1/8"	$17.79
272WR018	10"	1-5/16"	$23.55
272WR022	12"	1-1/2"	$31.41

Chrome Finish Handles			
TT No.	Size	Cap.	PRICE
272WR026	4"	1/2"	$13.30
272WR030	6"	15/16"	$15.22
272WR034	8"	1-1/8"	$13.94
272WR016	10"	1-5/16"	$21.46
272WR020	12"	1-1/2"	$31.65

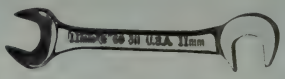
TECHNI-TOOL

Open End Standard Wrench Set – 5 pc

Sizes: 5/16" x 1/4", 7/16" x 9/16", 9/16" x 1/2", 9/16" x 11/16", 5/8" x 3/4" and rolled plastic pouch.

No. 758WR024 .....$37.25

TECHNI-TOOL



Open End Ignition Wrench Sets

Wrenches have a 15° angle on one end and 60° angle on the other end. Made of high alloy steel, heat-treated and chrome plated. **(USA)**

Inch Set – 8 pc

Opening Sizes:	
15°	60°
15/64"	13/64"
7/32"	1/4"
1/4"	7/32"
9/32"	5/16"
5/16"	9/32"
11/32"	3/8"
3/8"	11/32"
7/16"	1/2"

No. 758IE122 .....$21.75

Metric Set – 8 pc

Opening Sizes:	
15°	60°
4mm	5mm
4.5mm	5.5mm
6mm	7mm
7mm	6mm
8mm	9mm
9mm	8mm
10mm	11mm
11mm	10mm

No. 758IE120 .....$31.75

ALLEN

Fractional/Metric 12 Pt Full Polish Wrench Set - 18 pc

Set includes: Nine pc, 12 pt Combo Wrenches (1/4"-3/4"); Nine pc, 12 pt Combo wrenches (10-18mm); Full polish finish. **(USA)**

No. 322SC020 .....$268.65

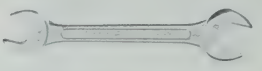
ALLEN

12 Point Combo Inch Set - 9 pc

Contains: 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4". Plastic Rack. **(USA)**

No. 322WR134 .....$104.43

ALLEN



Open End-Mini Metric Set - 6 pc

Sizes: 6mm x 8mm, 7mm x 9mm, 10mm x 11mm, 12mm x 14mm, 13mm x 15mm, 17mm x 19mm. Roll Pouch. **(USA)**

No. 322WR118 .....$62.66

Mini-Combination Wrench Set - 10 pc

Closed End: 7/16", 11/32", 3/8", 9/32", 5/16", 1/4", 15/64", 7/32", 5/32", 3/32"

Open End: 3/8", 5/16", 11/32", 1/4", 9/32", 15/64", 7/32", 13/64", 3/16", 5/32"

No. 711IE007 .....$17.50

Metric Sizes:

Closed End: 11, 10, 9, 8, 7, 6, 6, 5.5, 4.5, 4mm

Open End: 10, 9, 8, 7, 6, 5.5, 5, 5, 4, 4.5mm

No. 711IE217 .....$19.00

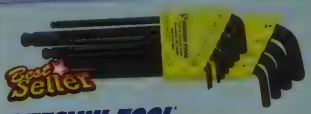
ARMSTRONG

Miniature Angle Open End Wrench Set - 14 pc

Miniature 15° and 80° angle wrenches and ignition pliers in a vinyl roll-up case. **Includes**: Wrenches (13): 13/64", 3/16", 7/32", 15/64", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2", 9/16", 5/8"; Pliers (1): Pliers-T & G, 5" ignition wrench. **(USA)**

No. 322IE7943 .....$180.24

Hex Key Sets



TECHNI-TOOL

Ballpoint L-Wrenches

Each wrench slips easily into a marked slot & locks securely into place. Each is two tools in one: ball end provides the convenience & speed of off-axis rotation; the long-arm provides the leverage for full torque. **(USA)**

Inch Size Sets

.050" - 5/16" 12 pc. set
No. 758IE936 .....$12.57

5/64" - 3/16" 7 pc. set
No. 758IE945 .....$6.95

.050" - 3/8" 13 pc. set
No. 758IE937 .....$16.74

Metric Size Sets

1.5mm - 10mm 9 pc. set
No. 758IE999 .....$14.07

1.5mm - 5mm 6 pc. set
No. 758IE946 .....$6.41

BONDHUS

204SC222

Stubby Balldriver® L-Wrench Sets

Get into tight spaces easily! Made of Protanium® High Torque Steel, which is up to 20% stronger than carbon steel.

13 pc. – .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8" .
No. 204IE6537.....$21.90

10 pc. – 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4"
No. 204IE6538.....$13.70

7 pc. – 1.5, 2, 2.5, 3, 4, 5, 6mm
No. 204IE6592.....$10.80

9 pc. – 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm
No. 204IE6599.....$17.80

13 pc. – .050-3/8" and 1.5-10mm
No. 204SC222 .....$37.50

Balldriver™ Hex Tools

204SC146

Ballpoint hex-tools for hand or power applications. Screws tightened or loosened at angles up to 25°. Full 360° turning.

(Inch Size) Sets

13 pc set – .050" - 3/8"
No. 204SC146.....$53.55

11 pc set – 5/64" - 3/8"
No. 204SC142.....$58.85

(Metric Size) Sets

8 pc set – 2-10mm
No. 204SC156.....$48.15

9 pc set – 1.5-10mm
No. 204SC158.....$42.20

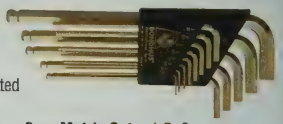
6 pc set – 1.5-5mm
No. 204SC150.....$19.20

Balldriver® L-Wrench Set – 10 pc

Inch sizes, plated finish. Sizes: 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4". **(USA)**

No. 204SC938 (16938) $14.25

Balldriver L-Wrenches with Gold Finish



Attractive, professional, easy-to-clean, and quality product with a new gold-plated finish. Designed for tight-spaces.

13-pc Inch Set – .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 3/8".
No. 204IE7937 .....$23.45

9-pc Metric Set – 1.5, 2, 3, 4, 5, 6, 8, 10mm.
No. 204IE8099 .....$19.00

Metric Hex L-Wrench Sets

204SC1466

Includes: 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm. **(USA)**

1.5mm - 10mm 9 pc. set
No. 204SC184 (not shown)....$9.70

1.5mm - 5mm 6 pc. set
No. 204SC1466 .....$4.85

Hex Inch/Metric Set - 22 pc

Includes: (9 pc - Metric) 1.5, 2, 2.5, 3, 4, 5, 6, 8 and 10mm; (13 pc - Inch) .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", and 3/8". **(USA)**

No. 204SC199 (not shown) $18.90

ProHold™ Button holds screws snug without weakening tool or interfering with tool rotation!

ProHold™ Balldriver® Hex Tools

Made from Protanium® high torque steel, which is 20% stronger than carbon steel. Rust-proof, non-magnetic. ***Lifetime Warranty.***

Screwdrivers

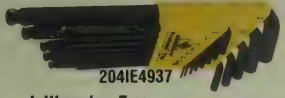
SAE – 8 pc Includes: .050", 1/16", 5/64", 3/32", 7/64, 1/8", 9/64", 5/32".
No. 204SC4632 .....**$26.40**

Metric – 6 pc
Includes: 1.5, 2, 2.5, 3, 4, 5 mm.
No. 204SC4686 .....**$22.40**

L-Wrenches

L-Wrenches 13 pc.
Includes: .050", 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8".
No. 204IE4937.....**$27.55**

L-Wrenches 10 pc.
Includes: 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4".
No. 204IE4938 .....**$17.20**



204IE4937

L-Wrenches 7 pc.
Includes: 1.5, 2, 2.5, 3, 4, 5, 6mm.
No. 204IE4992.....**$13.65**

L-Wrenches 9 pc. – Includes: 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm.
No. 204IE4999.....**$22.35**

T-Handles

T-Handles – 6 pc Includes: 5/32", 3/16", 7/32", 1/4", 5/16", 3/8".
No. 204IE146.....**$44.20**

The most productive innovation for hex tools in the last 30 years!

MagicRing Hex Tools

Save time by never losing a screw again. The hardened steel compression ring securely grips inner head of screw holding onto the screw and allowing you a free hand. The ball end makes a 20° angle entry possible. Made from CVM hardened tool steel with a corrosion-resistant chrome finish and precision machined for exact fit. (Germany)

881SC6990

9 pc. Metric L-Key Set in holder – 1.5-10mm
No. 881SC6990.....**$30.90**

13 pc. Inch L-Key Set in holder – 1/2-3/8"
No. 881SC6991.....**$38.64**

9 pc. Metric Driver Set – 1.5-10mm
No. 881SC6790.....**$46.08**

13 pc. Inch Driver Set – .050"-3/8"
No. 881SC6791.....**$64.32**

881SC6790

Torx® Key Sets

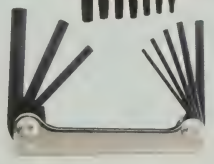
Mini Torx® L-Key Set - 7 pc

These Short Arm Torx® L-Keys are made of hardened chrome-vanadium-molybdenum steel. Black finish. Sizes: T6, T7, T8, T9, T10, T15, T20. Includes plastic key holder. (Germany)

No. 204WR392 .....**$14.86**

Star Fold-Ups – 8 pc

T6, T7, T8, T9, T10, T15, T20, T25
No. 204IE4532 .....**$12.50**



TECHNI-TOOL

Hex-Spline Socketscrew Wrench Set – 12 pc

A complete wrench kit for both hex and spline type screws used in electronics. Will fit No 2 to 3/8" screws. Key sizes: .050, .062, .071, .094, .125, .156, .069, .060, .076, .094, .110, .144.
No. 758IE9784 .....**$11.95**

Balldriver® T-Handle Hex & Longstyle Hex Tool Sets

Protanium™ high torque steel with welded steel handle for added strength, cushion grips for comfort. Smaller sizes have a straight hex to avoid breakage. Stands to keep tools neatly organized.

10 pc. SAE w/Stand Hex: 3/32", 7/64", 1/8", 9/64"; Balldriver: 5/32", 3/16", 7/32", 1/4", 5/16", 3/8". (Yellow)
No. 204IE190 .....**$57.00**

10 pc. SAE w/o Stand (above sizes)
No. 204IE138 .....**$53.50**

8 pc. Metric w/Stand Hex: 2mm, 2.5mm, 3mm; Balldriver: 4mm, 5mm, 6mm, 8mm, 10mm. (Red)
No. 204IE189 .....**$47.35**

8 pc. Metric w/o Stand (same sizes as above)
No. 204IE187 .....**$43.85**

GorillaGrip™ Fold Up Hex Sets

GorillaGrip™ features a 8650 industrial strength nickel chrome moly tool steel with tool ends chamfered to fit screws. Each blade you select rotates independently. Space-age composite handle is made from Protanium® high torque steel, which is 20% stronger than carbon steel. Color coded for easy identification: inch-yellow, metric-red, torx-green, inch and metric-orange.

7 Key Metric Hex Set
Sizes: 1.5, 2, 2.5, 3, 4, 5, 6mm.
No. 204SC592 .....**$5.80**

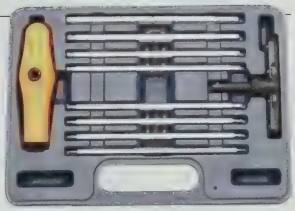
8 Key Torx Hex Set
Sizes: T6, T7, T8, T9, T10, T15, T20, T25.
No. 204SC126 .....**$13.90**

9 Key Inch Hex Sets
Sizes: 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4".
No. 204SC589 .....**$7.15**

9 Key Inch Hex Sets
Sizes: .050, 1/16, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32, 3/16".
No. 204SC591 .....**$5.55**

12 Key Inch/Metric Hex Set
6 Metric, 6 Inch Sizes: 1.5, 2, 2.5, 3, 4, 5mm, 5/64, 3/32, 7/64, 1/8, 9/64, 5/32".
No. 204SC550 .....**$9.85**

Reversible blades and choice of handles let you create the perfect tool for every job!



T-Handle Ball Hex/ Hex Sets – 10 pc

Blades feature ball hex drive on one end and same size hex on the other end (except largest). The 7-inch long blades are made of S2 steel heat treated to R^c 56/62 with a satin chrome finish. **Includes:** Ratcheting T-handle (set to turn either direction); Screwdriver/T-handle (holes positioned to use either way); 8 blades; Plastic storage case. ***Lifetime Warranty*** (Taiwan)

SAE (Shown) Sizes: 1/8", 9/64", 5/32", 3/16", 7/32", 1/4" reversible blades; 5/16" ball hex; 5/16" hex
No. 307SC100 .....**$44.36**

Metric (Not shown) Sizes: 2, 2.5, 3, 4, 5, 6mm reversible blades; 8mm ball hex; 8mm hex
No. 307SC101 .....**$44.36**

TECHNI-STAT

TECHNI-STAT

Handi-Vac™ Handling Tool

A totally self-contained vacuum good for handling surface mount components. Comes with a set of four twist-on probes for up to 3-ounce objects. The soft pliable squeeze bulb is treated with "ACL" staticide topical anti-stat.
Includes: (1) 1/4" cup, (1) 3/8" cup, (2) 1/8" cup. **(USA)**
No. 758SO401 .....**$18.50**

Bulb-Vac™ Vacuum Tool

An inexpensive tool no assembler should be without. Good for surface mount components. Soft bulb fits comfortably in your hand, can handle up to 3 ounce objects. Totally self-contained vacuum, no batteries to replace. **(USA)**

Size	Static Dissipative Cup	Conductive Cup	PRICE
3/8"	758SO402	758SO4021	$17.15
1/2"	758SO403	758SO4013	$17.15

Bulb Only **No. 758SO000** **$15.66**

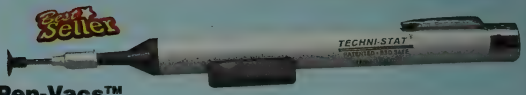
Vacuum Pick

Designed with a very easy and light depress to pick up. Probes and cups can be stored in the tail. **Specs:** Small 3.5 mm lifts up to 4g; Medium 6.5 mm lifts up to 50g; Large 9.5 mm lifts up to 130g. **Includes:** (1) vacuum pick up tool, (1) straight probe; (1) bent probe; Cups: (1) small, (1) medium, (1) large. (Japan)
No. 758SO400.....**$20.35**

Vacuum Transducer

Converts available air source to vacuum. Produces 22" Hg. vacuum at 60psig.
No. 758SO1280 .....**$39.40**

TECHNI-STAT



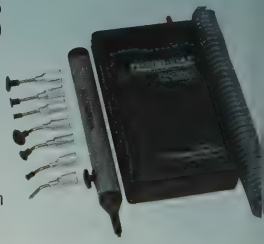
Pen-Vacs™

Low-cost vacuum tool is aluminum finished and lifts up to 300g without batteries or hoses. Eliminates handling small parts with fingers or tweezers.

Economy Kit - 4 Tips
Includes: Pen-sized vacuum, (1) straight probe w/1/4" cup, (3) bent probes w/cup sizes: (1) 1/8", (1) 1/4", (1) 3/8". **(USA)**
No. 758SO406 ESD safe.....**$61.75**
No. 758SO407 NON ESD **$60.00**

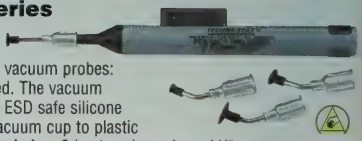
Deluxe Kit - 6 Tips *ESD Safe!*
Includes: one Pen-Vac vacuum tool plus set of six tips: (2) 3.17mm (1/8"), (2) 6.35mm (1/4"), (2) 9.52mm (3/8") mounted on 12.7mm (1/2") probes. 5-3/4" OAL. ESD Safe. **(USA)**
No. 758SO408 Kit.....**$77.15**
No. 758SO409 Pen VAC Only.....**$61.40**

PAC-VAC™



Take this ESD-safe, battery-operated vacuum anywhere. Clip to your belt or pocket and use with one hand. Produces vacuum of over 10" of mercury and runs up to 8 hours on a single battery. **Includes:** 4' of straight vacuum hose; 4' of coiled vacuum hose; Set of 7 vacuum tips; Vacuum pick-up handle; 9V alkaline battery. **(USA)**
No. 758SO320 .....**$266.16**

Pen-Vac® Pro-Series



This rugged all plastic static-dissipative pen vac has all metal ESD safe vacuum probes: two straight and two angled. The vacuum cups are high temperature ESD safe silicone rubber. Resistance from vacuum cup to plastic body is 10^{10} to $10^{11}\Omega$/sq. **Includes:** 3 bent probes, sizes: 1/4", 1/8" and 3/8"; 1 straight probe: 1/4". Cups are conductive silicone. Lifts up to 500 grams. **(USA)**
No. 758SO404 Gray **$42.85**
No. 758SO405 Black **$42.85**

HAKKO

394 Vacuum Pick-up Tool

Easy-to-use, battery operated pick-up tool for surface mount components. Uses (2) AAA batteries (included). **Includes:** 1.1 mm bent nozzle; 5 mm lifts 40gf and 10 mm pad lifts 120gf; manual and case. **Specs:** Outer Dimensions: 130mmL x 22mmW x 29mmH.
No. 821SO3941 .....**$94.77**

Vampire Vacuum

The hand-held SMD vacuum pickup tool is ideal for picking up and moving electronic components, large or small. With fountain pen dimensions, the *VAMPIRE* fits easily into your hand or pocket. And its new high-power probes have longer holding action. **Features include:** ergonomic comfort design; ESD Safe 100KΩ; lift up to 120g; heavy duty internal piston; Three high power probes: Angled, Straight and 4mm cup.
No. 784PR444 .....**$68.95**
No. 784AC555 Replacement cup kit **$51.00**

Weller

WLSK200 Vacuum Pen

Manually operated to pick up components with the push of a button.
No. 272SO7200 .....**$52.46**

PACE worldwide

Pace Handipik

The PACE HandiPik Component Handling Wand is a self-contained, hand-held device which allows the operator to quickly and easily pick up and place a wide variety of electronic components. The wand may be stored in a PACE Handpiece Redi-Rak.
No. 612PT702 .....**$61.40**

EDSYN

Vacuum Pick-up Tool

Small, compact, lightweight vacuum tool accepts a wide variety of needles and suction cups. ESD safe. Lifts up to 500 grams.
No. 330SO200.....**$30.83**

TECHNI-STAT

Whisper Quiet Operation!

A. Tec-Wand II™ SMD-Vac™

ESD safe all-purpose vacuum handling tool plugs directly into any 110 VAC outlet. This unit will handle all your surface mount components and features a long-life diaphragm pump that generates five-plus inches of mercury. **Includes:** 4' coiled vacuum hose; Set of seven vacuum tips: two 3.2mm(1/8"), two 6.4mm(1/4"), two 9.5mm(3/8") vacuum cups and one .050 vacuum tip. Vacuum pickup handle, rubber no-skid feet. **(USA)**

Tec-Wand II™ with Handle Holder
No. 758SO810 110 VAC **$192.10**
Tec-Wand II™ without Handle Holder
No. 758SO800 110 VAC **$171.55**

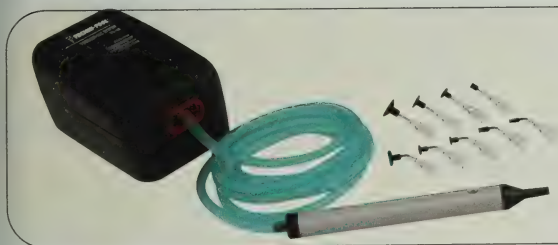
B. SMD-VAC™-HF

The perfect solution to avoid damaging small components with tweezers. Vacuum pump generates up to 6" of mercury and an open air flow of 2 lpm. **Includes:** 4' of coiled vacuum hose; Set of 7 vacuum tips; Vacuum pick-up handle. 110VAC. **(USA)**
No. 758SO840.....**$274.56**

Multi-Task Operation!

C. ESD Safe Dual Vacuum Tweezer System

For use by one or two operators. Can be used with two different size vacuum tips at the same time. Unit features illuminated power switch; ergonomic vacuum handle with suction release button and replaceable internal air filter. Quiet operation, long-life diaphragm pump. ESD safe. **Includes:** Two 5' coil hoses; nine vacuum tips: five bent probes with 3/32", 1/8", 3/16", 1/4", and 3/8" diameter vacuum cups, as well as four straight probes with 1/8", 1/4", 3/8" and 1/2 diameter vacuum cups. 110VAC. **(USA)**
No. 758SO2000.....**$344.47**



TECHNI-TOOL

Perfect for SMT Applications!

Tweezer-Vac System

Compact, quiet and perfect for handling all types of components. Vacuum handle includes a control hole feature and internal replaceable air filter. **Includes:** 5' straight hose; nine vacuum tips: five bent probes with 3/32", 1/8", 3/16", 1/4", and 3/8" diameter vacuum cups, as well as four straight probes with 1/8", 1/4", 3/8" and 1/2 diameter vacuum cups. 110VAC. **(USA)**
No. 758SO100.....**$94.75**

ESD Vacuum Cups

Composition: Silicone Rubber; Color: Black; Surface Resistance: $10^6\Omega$/sq.; Operating Temperature: -55° to 230°C. **(USA)**

No. 758SO411 3/32" **$2.30**
No. 758SO412 1/4" **$2.30**
No. 758SO413 3/8" **$2.30**
No. 758SO414 1/2" **$2.30**

Static Dissipative Non-Marking Cups

Composition: Buna-N.; Color: Black; Surface Resistance: $10^{13}\Omega$/sq.; Operating Temperature: 20° to 120°C. **(USA)**

No. 758SO423 3/32" **$2.30**
No. 758SO424 1/4" **$2.30**

FOR QUANTITY PRICING ON VACUUM CUPS CALL 800-832-4866

Static Dissipative Small Parts Tips

For handling very tiny parts. ESD-safe Delrin plastic eliminates chance of static or mechanical abrasion damage up to 212°F (100°C). **(USA)**

O.D.	I.D.	Straight	Bent	PRICE
.020"	.005"	758SO5556	758SO5555	$33.50
.030"	.020"	758SO391	758SO910	$33.50
.060"	.040"	758SO390	758SO908	$33.55

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.

We reserve the right to correct misprints.

TECHNI-TOOL® brand tweezers are designed . . .

to meet the precision requirements of the electronic industry. They're hand-crafted in Switzerland of the finest alloys available. They're lightweight, durable, and crafted by the same artisans that make tools for fine Swiss watches.

Quality guaranteed – our name is on every one!

ONE MINUTE GUIDE TO PICKING THE RIGHT TWEEZERS.

Many people think the only important choice in tweezers is the type of head. But choosing the right material can make a critical difference to the cost and success of your application.

Here's a quick guide to our different tweezer materials:

Carbon Steel: Hardened tips. Highly magnetic. Extends life but is susceptible to rust.

Carbon Fiber Tip: Withstands high heat. Lightweight. Resists wear and abrasion. ESD safe. Excellent for chemicals, halogen and halogenated solvents.

Ceramic: Zirconia toughened alumina with aluminum handle. High strength and hardness. Excellent thermal properties to 1400°C. Corrosion resistant, electrically insulating 10.cm, non-magnetic.

Diamond Coated: Stainless steel coated with diamond clusters that develop a crystal structure similar to a natural diamond. High elasticity and adhesion strength. Surface is both biocompatible and contaminant free. Long wearing, ESD safe, anti-magnetic, and chemically inert up to 350°C (662°F).

Glass Filled Delrin: Excellent for handling semiconductors without damage. Acid resistant, non-magnetic, non-absorbent, lightweight.

Stainless Steel: Anti-magnetic. Resists rust, corrosives, and acids. Excellent overall quality.

Titanium: 40% lighter than steel. Very good mechanical properties at 350°C (662°F). Resists chemicals and corrosion. Contamination free surface.

0 General purpose assembly; slim blades tapering to fine round points. 4-1/2" OAL.
No. 758TW522 Stainless steel **$26.25**
No. 758TW334 Carbon steel **$23.80**
No. 758TW123 Titanium **$40.34**

Techni-Tool® Swiss Quality Production Tweezers

0A Slim blades, reduced tips, rounded points. 4-1/2" OAL.
No. 758TW256 Stainless steel **$35.20**

0C Small slim tweezer, extra fine points. 3-1/2" OAL.
No. 758TW514 Stainless steel **$25.95**
No. 758TW332 Carbon steel **$25.76**
No. 758TW124 Titanium **$44.30**

Best Seller

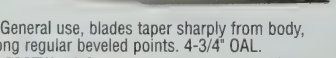
00 Strong, heavy-duty blades, tapering to regular strong points. 4-3/4" OAL.
No. 758TW446 Stainless steel **$24.26**
No. 758TW280 Carbon steel **$25.48**
No. 758TW125 Titanium **$43.05**

Best Seller

00D Strong, heavy-duty blades tapering to regular strong points with serrations on the tips and handles for better grip. 5" OAL.
No. 758TW450 Stainless steel **$26.71**
No. 758TW283 Carbon steel **$28.34**
No. 758TW126 Titanium **$43.88**

000 Fine point radius edges. 4-3/4" OAL.
No. 758TW260 Stainless steel **$30.55**
No. 758TW127 Carbon steel **$34.17**
No. 758TW128 Titanium **$46.40**

1 General use, with fine points. 4-3/4" OAL.
No. 758TW454 Stainless steel **$24.39**
No. 758TW286 Carbon steel **$25.76**
No. 758TW414 Titanium **$40.34**



2 General use, blades taper sharply from body, strong regular beveled points. 4-3/4" OAL.
No. 758TW458 Stainless steel **$24.26**
No. 758TW290 Carbon steel **$25.48**
No. 758TW418 Titanium **$50.35**

Best Seller

2A Flat .050" tips, smooth on all sides to prevent marring silicon, germanium and crystal wafers. 4-3/4" OAL.
No. 758TW462 Stainless steel **$24.26**
No. 758TW132 Carbon steel **$25.48**
No. 758TW422 Titanium **$39.90**

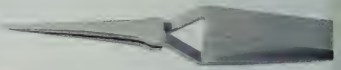
2AD Flat .050" tips, smooth on all sides to prevent marring silicon, germanium and crystal wafers, with a serrated handle for a firm grip. 4-3/4" OAL
No. 758TW468 Stainless steel **$30.25**
No. 758TW133 Carbon steel **$27.94**
No. 758TW137 Titanium **$42.11**

2AC Non-magnetic nickel. Flat .050" tips, smooth on all sides to prevent marring silicon, germanium and crystal wafers. 4-3/4" OAL.
No. 758TW464 ..... **$27.60**

2AB Curved tips, long, thin and rounded. Tip width 1.28mm. For semiconductor wafers. 4-7/8" OAL.
No. 758TW062 Stainless steel **$29.05**
No. 758TW140 Carbon steel **$31.90**
No. 758TW142 Titanium **$49.10**

2AD S-Shaped Bent Tip 4-1/16" OAL.
No. 758TW066 Stainless steel **$39.70**

52A Flat .050" tips, smooth on all sides to prevent marring silicon, germanium and crystal wafers. Anti-crush feature. 4-3/4" OAL.
No. 758TW192 Stainless steel **$35.10**
No. 758TW147 Carbon steel **$37.75**
No. 758TW149 Titanium **$54.55**



2AX Reverse action. Blunt tip. 4-3/4" OAL.
No. 758TW602 ..... **$38.15**

F Flattened tips, 4-3/4" (120mm) OAL.
No. 758TW240 Stainless steel **$34.61**

3 Very fine, rounded points for assembly work. 4-3/4" OAL
No. 758TW474 Stainless steel **$21.12**
No. 758TW294 Carbon steel **$25.76**
No. 758TW424 Titanium **$40.34**

3C Very fine, rounded points for assembly work. 4-3/8" OAL
No. 758TW478 Stainless steel **$22.26**
No. 758TW298 Carbon steel **$27.40**
No. 758TW428 Titanium **$40.34**

53C Very fine, rounded points, for assembly work, anti-crush feature. 4-1/2" OAL.
No. 758TW194 Stainless steel **$38.73**
No. 758TW151 Carbon steel **$37.75**
No. 758TW155 Titanium **$49.88**

4 For extra fine work. Blades taper sharply from body to very fine, long, rounded points. 4-1/4" OAL.
No. 758TW482 Stainless steel **$24.90**
No. 758TW302 Carbon steel **$27.80**
No. 758TW430 Titanium **$43.20**

5 For extra fine work. Long blades break sharply and taper to super fine, round points. 4-3/8" OAL.
No. 758TW486 Stainless steel **$25.35**
No. 758TW306 Carbon steel **$31.47**
No. 758TW434 Titanium **$45.92**

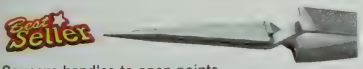
5 Reverse action. 4-3/8" OAL.
No. 758TW605 .....**$38.15**

5A Fine strong points with an improved blade angle for visibility. 4-3/8" OAL.
No. 758TW490 Stainless steel.....**$30.30**
No. 758TW157 Carbon steel **$30.12**
No. 758TW161 Titanium **$45.92**

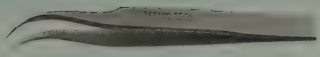
5AR For die attaching. 4-5/8" OAL.
No. 758TW202 Stainless steel.....**$29.30**
No. 758TW163 Carbon steel **$31.07**
No. 758TW164 Titanium **$46.74**

6 For wire coiling or hairspring. Sharply angled, super fine, tapered points. Point length: 9/16", 4-1/2" OAL.
No. 758TW494 Stainless steel **$39.00**
No. 758TW310 Carbon steel **$41.25**
No. 758TW438 Titanium **$53.83**

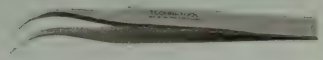
7 Reverse action. Bent tip. 4-1/2" OAL.
No. 758TW607 .....**$34.15**



Squeeze handles to open points.
Small blades, sharp smooth points. 4-3/4" OAL.
No. 758TW518 .....**$21.94**
Small blades with sharp, smooth points. 4-3/4" OAL. (Pakistan)
No. 758TW410.....**$6.25**



7 For assembly work, hand can rest on bench. Curved, super fine, smooth rounded points. 4-1/2" OAL.
No. 758TW498 Stainless steel **$29.25**
No. 758TW314 Carbon steel **$32.43**
No. 758TW442 Titanium steel.....**$52.90**



7B For assembly work, hand can rest on bench. Curved super fine, smooth rounded points. 4-1/2" OAL.
No. 758TW502 Stainless steel.....**$27.53**
No. 758TW318 Carbon steel **$32.43**
No. 758TW165 Titanium **$47.55**

8 Extra-heavy tweezer for bending or straightening, blades angle to non-cutting knife edge.
No. 758TW506 Stainless steel 4-1/2" OAL ..**$38.43**
No. 758TW322 Carbon, 4-3/4" OAL.....**$40.47**
No. 758TW167 Titanium **$56.82**

AA Fine tips with beveled edges. 4-3/8" OAL.
No. 758TW530 Stainless steel **$14.99**

AC Strong, short, heavy blade, fine tip tweezers, with serrated firm grips. 4-1/4" OAL.
No. 758TW526 Stainless steel.....**$29.71**

MM Assembly tweezer, extra-long blades, fine beveled points. 5" OAL.
No. 758TW538 Stainless steel **$16.40**

SS-SA Super slim tweezers precision tweezers ideal for working near heat sources. Straight, sharp tips. 6" (150mm) OAL. (Switzerland)
No. 758TW606 .....**$37.85**
No. 758TW170 Titanium **$50.90**

250SA Slotted beak with round tips. 4-1/8"OAL.
No. 758TW0250.....**$63.75**

AM Anti-sparking Brass version of pattern MM. Excellent for handling parts that scratch easily. 5" OAL.
No. 758TW236 brass **$31.48**

GG Heavy-duty tweezer, long blades break sharply from body to fine rounded points. 5" OAL.
No. 758TW534 Stainless steel.....**$17.17**

Techni-Tool® Tweezer Kit

TECHNI-TOOL
Swiss Precision Tweezer Kit
Techni-Tool® tweezers, Swiss-made of a special anti-magnetic, anti-acid stainless steel. Kit consists of Type 00 (758TW446), Type 1 (758TW454), Type 3C (758TW478), Type 5 (758TW486), and Type 7 (758TW498) tweezers in a vinyl pouch. (Switzerland)
No. 758TW546 .....**$95.25**

Carbon Steel Cutting Tweezers

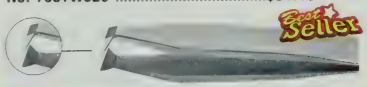
TECHNI-TOOL

Carbide Insert Cutting Tweezer

Miniature head size fits into tight areas where regular cutters can't reach. Ideal for high density PCBs and SMT. Cuts fiber optics and shielding, stainless steel braids and wires, cabling and wiring harnesses in PCB assembly and rework. Tungsten carbide tips provide precise cutting, extended life. Anti-magnetic.
No. 758TW018 .....**$99.85**

14AN **Stainless Steel Cutting Tweezer**
For soft wire cutting (max dia. 0.25mm). Round tips, 90° angles and parallel cutting edges. 4-1/2" OAL.
No. 758TW0114 .....**$53.96**

15A **Carbon Steel Cutting Tweezer**
Fine cutting tweezers, strong nipper-like blades. Cutting edges angle to a point to cut close on super fine wire. Length of jaws 9/16" x 1/16"W. 4-1/2" OAL.
No. 758TW326 .....**$54.10**



15AGW **Carbon Steel Cutting Tweezer**
Same as type No. 758TW326. Parallel cutting edge. Length of jaws 9/16" x 1/16"W. 4-3/4" OAL.
No. 758TW330 .....**$54.10**

Carbon fiber tip tweezers combine the precision of metal tweezers with the softness of plastic tweezers. Tips change out in seconds. Heat resistant to 464°F/240°C. **PEEK tip** tweezers are very hard with high resistance to wear. Heat resistant to 572°F/300°C. **Lightweight ceramic tip** tweezers feature stainless steel handles, and are heat resistant to 1832°F/1000°C.

Bent Handle

No. 758TW0300 PEEK.....$32.57
No. 758TW1300 Carbon fiber tip $31.60

Straight handle

No. 758TW0301 PEEK.....$32.70
No. 758TW0302 PEEK repl. tips $6.54
No. 758TW0259 Carbon fiber tip $31.48
No. 758TW2590 Carbon fiber repl. tips.....$9.54

2AB Style Type 2AB

Flat curved smooth tips to prevent marring.
4-7/8" OAL.

No. 758TW204 PEEK $32.60
No. 758TW205 PEEK repl. tips $9.54
No. 758TW0254 Carbon fiber tip $34.40
No. 758TW255 Carbon fiber repl. tips $6.54

2A Style Type 2A

Flat tip to handle and position small parts.

No. 758TW206 PEEK $35.95
No. 758TW207 PEEK repl. tips $9.54
No. 758TW0304 Carbon fiber tip.....$30.95
No. 758TW0305 Carbon fiber repl. tips $6.02

5 Style Type 5

Extra fine tip to handle and position small parts.

No. 758TW208 PEEK $35.90
No. 758TW209 PEEK repl. tips $9.54
No. 758TW0306 Carbon fiber tip $34.20
No. 758TW0505 Carbon fiber repl. tips $9.54

Techni-Tool® Quick Change Tip Tweezers

242B Style Type 242B

Curved flat tip to handle and position small parts.

No. 758TW211 PEEK.....$35.90
No. 758TW212 PEEK repl. tips $9.54
No. 758TW0308 Carbon fiber tip $31.26
No. 758TW0309 Carbon fiber repl. tips $9.33

246 Style Type 246 – Bent tips

No. 758TW213 PEEK $32.70
No. 758TW214 PEEK repl. tips.....$9.54
No. 758TW0246 Carbon fiber tip $31.48
No. 758TW2046 Carbon fiber repl. tips $9.54

249 Style Type 249 – Blunt points

No. 758TW215 PEEK $36.05
No. 758TW217 PEEK repl. tips $9.54
No. 758TW0249 Carbon fiber tip $31.48
No. 758TW2490 Carbon fiber repl. tips $9.54

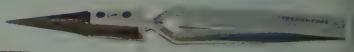
3 Style Type 3 Sharp points

No. 758TW227 PEEK.....$32.70
No. 758TW228 PEEK repl. tips $9.54
No. 758TW3000 Carbon fiber tip.....$31.48
No. 758TW0303 Carbon fiber repl. tips.....$9.54

2AX Style Type 2AX

Round points, Self-closing.

No. 758TW229 PEEK $36.79
No. 758TW207 PEEK repl. tips $9.54
No. 758TW2000 Carbon fiber tip $35.57
No. 758TW0202 Carbon fiber repl. tips $9.54



5X Style Type 5X

Sharp points. Self-closing

No. 758TW235 PEEK.....$36.79
No. 758TW209 PEEK repl. tips $9.54
No. 758TW5000 Carbon fiber tip $35.57
No. 758TW0505 Carbon fiber repl. tips.....$9.54

7 Style Type 7

Curved fine tips, 5-1/8"OAL.

No. 758TW239 PEEK.....$32.70
No. 758TW241 PEEK repl. tips $9.54
No. 758TW0256 Carbon fiber tip.....$31.48
No. 758TW257 Carbon fiber repl. tips.....$9.54

Ceramic Tip Tweezers

Curved fine tips

No. 758TW265 Ceramic tip.....$68.14
No. 758TW0075 Repl. tips w/screws $34.07

Fine tips

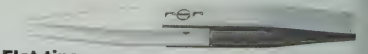
No. 758TW266 Ceramic tip $71.97
No. 758TW0072 Repl. tips w/screws $34.07

Ultra-fine tips

No. 758TW267 Ceramic tip $72.60
No. 758TW0071 Repl. tips w/screws $34.07

Standard tips

No. 758TW268 Ceramic tip $68.30
No. 758TW0073 Repl. tips w/screws $34.07



Flat tips

No. 758TW269 Ceramic tip $75.05
No. 758TW0074 Repl. tips w/screws $34.07

Techni-Tool® Carbofib Permanent Tip Tweezers

Same as above but tips are not replaceable. Heat resistance to 520°F/270°C.

00 Type 00, round points 5" OAL (125mm).
No. 758TW009.....$31.65

3X Type 3, self closing 5" OAL (125mm).
No. 758TW013 .....$35.57

5X Type 5, self closing 5" OAL (125mm).
No. 758TW019 .....$35.57

2A Type 2A, round points 5" OAL (125mm).
No. 758TW008 .....$31.65

3C Type 3, sharp points 4-1/4" OAL (110mm).
No. 758TW011 .....$31.65

5CF Type 5, sharp points 5" OAL (125mm).
No. 758TW017 .....$31.65

Techni-Tool® Miniature Production Tweezers

Anti-magnetic/anti-acid stainless steel miniature tweezers for microelectronic assembly. Use where a fine tip is needed without the excess bulk of long tweezers. (Switzerland)

M-OOD Serrated tips and grips. 3-1/2" OAL
No. 758TW248 .....$29.25

M-2A Rounded flat tips. 2-3/4" OAL. Best Seller
No. 758TW252 .....$26.71

M-2 Sharply tapered tips. 3-1/4" OAL.
No. 758TW250 .....$26.71

M-3C Tapered shank, sharp fine tips. 2-3/4" OAL.
No. 758TW244 .....$26.71

M-4 Very fine tips. 3-1/4" OAL.
No. 758TW246 .....$26.71

M-HD Dove tailed, serrated tips and grips. 3-1/2" OAL.
No. 758TW254 .....$26.71

M-H Dove tailed, smooth tips and grips. 3-1/2" OAL.
No. 758TW510 .....$26.71

EXCELTA® CORPORATION

IntelliTweezer™ Best Seller

To find out more about these Excelta Tweezers turn to page 125

Techni-Tool Diamond-like Carbon Coated Stainless Steel Tweezers

Anti-magnetic stainless steel tweezers with diamond-like carbon coated tips. Through a plasma-assisted deposition technique, carbon clusters with the properties of diamond are grown onto tips. **Features:** High hardness and elasticity; Extremely high wear and abrasion resistant; No particulate shedding; Chemically inert up to 350°C (662°F); Bio-compatible; ESD safe. (Switzerland)

00 DC
Flat edges, thick tips
No. 758TW0000 .....$43.70

2A DC
Flat, round tips
No. 758TW0008 .....$39.79

3 DC
Very sharp, superior finish
No. 758TW0009 .....$39.25

3C DC
Very sharp, superior finish, short
No. 758TW0010 .....$43.20

5 DC
Extra fine tips
No. 758TW0011 .....$48.45

7 DC
Fine tips, curved
No. 758TW0012 .....$46.33

SS DC
Long, fine tips
No. 758TW0013 .....$39.93

65A DC
Long, fine tips, curved
No. 758TW0014 .....$47.25

Diamond-like Carbon Coated Tweezers 5 pc. Set
This set includes: 758TW0000, 758TW0008, 758TW0009, 758TW0011, 758TW0012.
No. 758TW0015 .....$161.50

Techni-Tool® Stainless Steel Static Dissipative Tweezers

Conductive polyester/epoxy coated handles with stainless steel tips and 10^5-$10^6\Omega$ surface resistance. Resists heat up to 120°C and has good chemical resistance to many diluted acids and alkalis. Anti-magnetic. (Switzerland)

00 Sharp tips. 4-5/8" OAL
No. 758TW560 .....$33.60

2A Flattened, rounded tips. 4-5/8" OAL
No. 758TW561 .....$39.05

3C Sharp, fine tips. 4-3/8" OAL
No. 758TW562 .....$35.29

5 Sharp, extra fine tips. 4-3/8" OAL
No. 758TW563 .....$43.40

7 Curved, very sharp tips. 4-5/8" OAL
No. 758TW564 .....$41.70

SAVE When you buy as a five piece set!
Includes one of each shown above.
No. 758TW565 .....$151.80

Techni-Tool® Super-Alloy Tweezers

TECHNI-TOOL

Super-Alloy NC Tweezers

Comparable to Dumontstart® or Taxal® Nickel-Chromium-Molybdenum super-alloy tweezer. Provides excellent strength from room temperature to 800°C. Six times harder than stainless steel, up to 60 HR^c on tips. Fatigue resistant, very high shape retention. Anti-magnetic, anti-acid, excellent corrosion resistance to most chemicals, salts, and acids. Ideal for laboratory and medical applications in aggressive chemical environments. (Switzerland)

***Now with Ultra Fine Tips**

1 NC No. 758TW630 .....$44.40

2 NC No. 758TW631 .....$41.43

2A NC No. 758TW632 .....$41.43

3C NC No. 758TW633* $40.74

3 NC No. 758TW634* $40.05

4 NC No. 758TW635* $43.61

5 NC No. 758TW636* $50.10

5A NC No. 758TW637* $53.43

5C NC No. 758TW638 .....$53.95

7 NC No. 758TW639* $48.78

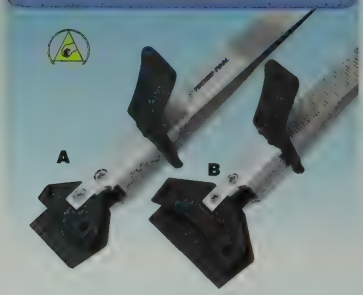
7A NC No. 758TW640 .....$48.78

F NC No. 758TW641 .....$52.87

SS NC No. 758TW642 .....$40.74

65A NC No. 758TW643 .....$45.38

Techni-Tool® ESD-Safe Carbon Wafer Handling Tweezers



TECHNI-TOOL

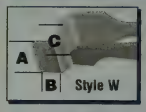
ESD safe with patented ESD-safe replacement tips and EZ lever handle. (Switzerland)

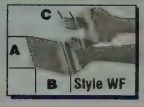
A. 4" to 6" tweezer & tip
to handle 4" to 6" wafers
No. 758TW508 .....$32.40
4" to 6" replacement tips
to handle 4" to 6" wafers
No. 758TW159 .....$9.03

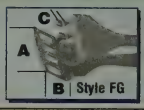
B. 6" to 10" tweezer & tip
to handle 6" to 10" wafers
No. 758TW509.....$30.85
6" to 10" replacement tips
to handle 6" to 10" wafers
No. 758TW591.....$11.35

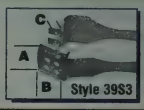
Techni-Tool® Wafer Handling Tweezers

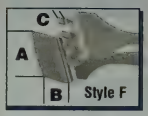
Stainless Steel. 4-7/8" OAL (125 mm).

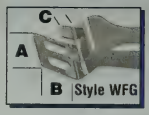


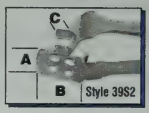




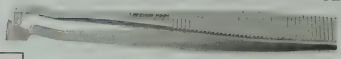








TT No.	Style	Dimensions A in.	A mm	B in.	B mm	C in.	C mm	PRICE
758TW044	2W	.255	6.5	.196	5.0	.125	2.5	$28.21
758TW068	2WF	.255	6.5	.354	9.0	.125	2.5	$28.21
758TW070	2WFG	.255	6.5	.354	9.0	.125	2.5	$28.21
758TW162	3W	.375	9.5	.375	10.0	.125	2.5	$28.21
758TW166	3WFG	.375	9.5	.375	10.0	.125	2.5	$28.21
758TW174	4W	.500	12.0	.31	7.5	.125	3.0	$29.73
758TW178	4WF	.500	12.0	.354	9.0	.125	2.5	$27.95
758TW182	4WFG	.500	12.0	.354	9.0	.125	2.5	$29.76
758TW138	38FG	.375	9.5	.45	11.0	-	-	$33.52
758TW144	39F	.500	12.0	.437	10.5	-	-	$33.66
758TW148	39 FG	.500	12.0	.437	10.5	-	-	$33.40
758TW154	39S3	.375	9.5	.230	8.5	.090	2.4	$36.95
758TW150	39S2	.255	6.5	.230	8.5	.090	2.4	$36.95
758TW049	48WF	1.10	28.0	.437	9.0	-	-	$36.95



86B Wafer Tweezers
3-1/4" OAL. Stainless steel
No. 758TW221 .....$43.33

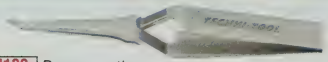
37S For 2" to 3" Wafers
Two pins stop wafer. Extended blade grips edge. 4-7/8" OAL.
No. 758TW134.....$33.40

35AP Smooth Surface
For semi-conductor wafers, with stop pin. 4-7/8" (125mm) OAL. (Switzerland)
No. 758TW102 Stainless Steel Anti-Magnetic $33.66

35A No-Mar SMD Tweezer
With smooth, wide tip. 4-3/4" OAL. Stainless steel.
No. 758TW106 .....$25.80

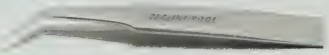
Techni-Tool® SMD Handling Tweezers

These anti-magnetic, satin anti-glare finish, surgical grade stainless steel tweezers offer smooth handling and positioning of all your SMD components. (Switzerland)

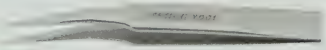


SM100 Reverse action.
For handling SMDs. 4-1/2" OAL.
No. 758TW002 .....$31.75

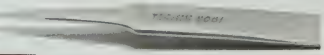
SM102 Reverse action. For soldering and desoldering 20, 28, 44 and 68 LCCC and PLCC pad devices. 4-1/2" OAL.
No. 758TW004 .....$32.30



SM103 For handling and positioning 2 and 3 lead SOT packages at 45° angle. 4-1/2" OAL.
No. 758TW103 .....$26.30



SM104 For handing and positioning 3 lead SOT packages, monolithic chip capacitors, etc. 4-3/4" OAL.
No. 758TW401 .....$26.30



SM105 Special design for positioning all SOT packages vertically. 4-3/4" OAL.
No. 758TW105 .....$28.75

SM106 For positioning all SOT packages horizontally. With flat base tips (4mm long). 4-3/4" OAL.
No. 758TW610 .....$28.95

SM107 SMD tweezer for positioning all flat devices at 60° angle. 4-3/4" OAL.
No. 758TW107 .....$26.30

SM108 Anti-Crush. For positioning and soldering 1mm wide components. 4-3/4" OAL.
No. 758TW810 .....$25.85

SM109 For positioning components with 45° tips. 4-3/4" OAL.
No. 758TW109 .....$26.30

SM111 Chip handling tweezer, double angle for work under magnification. Machined ledge on contact surface to get under SMDs. Grooved tips. 4-3/4" OAL.
No. 758TW003 .....$28.45

SM110 SMD tweezer for positioning monolithic chip capacitors. Grooved tips. 4-3/4" OAL.
No. 758TW110 .....$26.30

SM112 For positioning 5mm monolithic chip capacitors at 60° angle. Grooved tips. 4-3/4" OAL.
No. 758TW112 .....$26.30

SM115 Grooved tips at 30° angled for holding and positioning cylindrical devices. Up to 1mm dia. 4-3/4" OAL.
No. 758TW115 .....$26.30

SM117 For positioning SOT packages at 30° angle. 4-3/4" OAL.
No. 758TW711 .....$26.30

SAVE When you buy as a five piece set!
Includes 1 each: 758TW103, 758TW107, 758TW810, 758TW003 and the 758TW115.
No. 758TW015.....$153.55

TECHNI-TOOL Stainless Steel Ergonomic Precision Tweezers

New & Improved ESD foam grips for increased comfort and durability! New!

Stainless Steel Ergonomic Precision Tweezers

Ergonomically designed and lightweight. ESD safe. Anti-magnetic, anti-acid resistant, stainless steel. (Switzerland)

AA General purpose, straight fine tips. 5" OAL.
No. 758TW082 .....$21.00

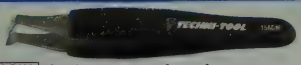
2A Flat, round tips. 4-3/4" OAL.
No. 758TW083 .....$20.00

3C Very sharp. fine tips. 4-1/4" OAL.
No. 758TW085 .....$23.50

3 Very sharp, fine tips. 4-3/4" OAL.
No. 758TW086 .....$23.50

5 Extra fine tips. 4-1/4" OAL.
No. 758TW087 .....$25.00

7 Very fine, curved tips. 4-1/2" OAL.
No. 758TW089 .....$26.50



15AGW Cutting tweezers for soft copper, gold, silver, magnetic wires. 4-1/2" OAL.
No. 758TW090 .....$50.00

SAVE

When you buy as a five piece set!

Our most popular ergonomic tweezers!

Ergonomic Precision Kit

Different tips and angles for multiple handling jobs.

Kit contains: one each of the following styles: AA, 2A, 3C, 5, 7, in ESD-safe custom carrier.

No. 758TW091 .....$125.00

Erem Stainless Steel Ergonomic Tweezers

Work with ultimate comfort, control, and ESD protection. These ergonomic tweezers are designed with an ESD cushion grip. Anti-acid. (Switzerland)

2A Flat, round precision tips
No. 272TW002 .....$21.18

3C Straight, high precision tips
No. 272TW003.....$24.50

00 Straight, fine strong precision tips
No. 272TW004 .....$22.03

5 Straight, thin tapered ultra-fine high precision tips
No. 272TW005 .....$26.21

7 Curved, fine point high precision tips
No. 272TW006 .....$27.58

Clauss Anti-Wicking Tweezers

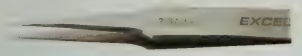
Reverse-action copper/beryllium alloy tweezers are made from are chrome plated for solder-free operation. **(USA)**

No. 250TW014 AWG Size 18.....$25.10
No. 250TW016 AWG Size 20.....$25.10
No. 250TW018 AWG Size 22.....$25.10
No. 250TW020 AWG Size 24.....$25.10

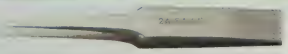
EXCELTA Economy Tweezers

Economy anti-magnetic, stainless steel tweezers.

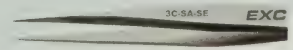
00 Medium tips, strong straight points. General purpose tweezer. 4-1/2" OAL.
No. 352TW010 .....$3.79



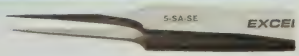
2 Tapered tips, medium points. For handling, bending small components and wires. 4-3/4" OAL.
No. 352TW048 .....$3.79



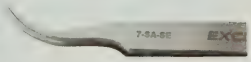
2A Tapered tips, flat round points. For handling micro components and wires. 4-3/4" OAL.
No. 352TW016.....$3.79



3C Very fine tips, precision points. Shorter body helps for working under magnification. 4-1/4" OAL.
No. 352TW013 .....$3.79



5 Micro fine tips, precision points. For die attaching and wire bonding. 4-1/4" OAL.
No. 352TW032 .....$3.79



7 Curved tips, high precision points. Curved tips allow maximum visibility under magnification. 4-1/2" OAL.
No. 352TW011.....$3.79

TECHNI-TOOL Holders

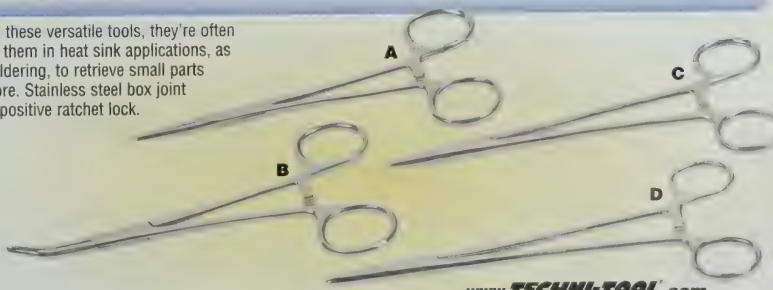
Holders, hemostats, forceps…whatever you call these versatile tools, they're often the most used items in any technician's kit. Use them in heat sink applications, as pick –up tools or clamps, to hold fixtures for soldering, to retrieve small parts from hard-to-reach places, and much, much more. Stainless steel box joint construction, slim serrated jaws, three position positive ratchet lock.

Standard Straight Tips – 5-1/2" OAL
A. No. 758TW054.....$6.85

Standard Curved Tips – 5–1/2" OAL
B. No. 758TW052 .....$6.85

Large Straight Tips – 7" OAL
C. No. 758TW224.....$9.40

Jumbo Straight Tips – 8" OAL
D. No. 758TW060.....$10.45



TECHNI-TOOL® Economy Assembly Tweezers

Excellent for bending and inserting fine wires or component leads into miniature circuits. Stainless Steel.

Extra Long Tweezer
Straight points. 6-7/8" OAL. (Pakistan)
No. 758TW370 .....$4.20

Corrugated points; serrated, non-slip grip. 7" OAL. (Pakistan)
No. 758TW362 .....$3.20

Serrated, curved 1" points . 6-3/4" OAL. (India)
No. 758TW366 .....$7.45

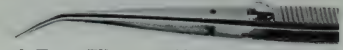
Heavy Gripper With Serrated Tips
6" OAL. (Pakistan)
No. 758TW026 .....$6.50

Serrated Points – Chrome Plated
Non-slip, corrugated grip. 5-1/2" OAL. (Germany)
No. 758TW378 Fine point $22.70
No. 758TW374 Medium point.....$2.00

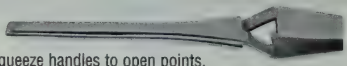
Reverse Action Tweezer
Straight 6" long, insulated handles, non-serrated straight jaws. Stainless steel. (Pakistan)
No. 758TW036 .....$6.50

Filament Holder
Stainless steel, curved serrated tips. Excellent for bending and inserting fine diameter wires and component leads in miniaturized circuits. 6" OAL. (Pakistan)
No. 758TW012 .....$6.50

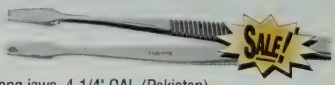
Angular Filament Holder 6" OAL. (Pakistan)
No. 758TW016 .....$7.00



Lock-Type Filament Holder
6" OAL. (Pakistan)
No. 758TW024 .....$6.50



Squeeze handles to open points.
Blunt serrated point. 6-1/2" OAL. (India)
No. 758TW402 .....$6.05

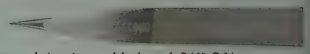


Oblong jaws. 4-1/4" OAL (Pakistan)
No. 758TW088 .....Reg. ~~$5.25~~ **SALE $2.00**

35SAL Extra-long, special 35SAL. 12" OAL. (Pakistan)
No. 758TW116 .....Reg. ~~$12.00~~ **SALE $5.00**

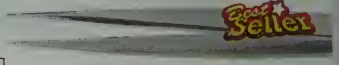
Radius jaws. 4-1/2" OAL (Pakistan)
No. 758TW096.....Reg. ~~$14.00~~ **SALE $2.00**

Boley-Style
AA Strong, fine points. 4-3/4" OAL. (Pakistan)
No. 758TW338 Nickel-plated.....$8.70



00 Heavy duty strong blades. 4-3/4" OAL
No. 758TW021 .....$7.85

2A Flat rounded tip .050". 4-1/2" OAL
No. 758TW020 .....$7.85



3 Very fine rounded points. 4-1/2" OAL
No. 758TW300 .....$7.85

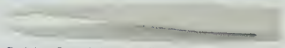
3C Same as No. 3 but shorter. 4-1/2" OAL
No. 758TW033 .....$8.15

5 For extra fine work, long sharp super fine points. 4-1/2" OAL
No. 758TW051 .....$7.85

7 Curve fine tips. 4-1/2" OAL
No. 758TW700 .....$8.15

SAVE When you buy as a five piece set!
Includes 1 each: 758TW020, 758TW300, 758TW033, 758TW051, and 758TW700.
No. 758TW043 .....$35.35

TECHNI-TOOL® Plastic Production Tweezers



Glass-filled Delrin. Special superfine points. 4-1/2" OAL. **(USA)**
No. 758TW620 .....$4.05

Glass-filled Delrin. Medium fine points. 4-1/2" OAL. **(USA)**
No. 758TW621 .....$4.25

Glass-filled Delrin. Extra wide, thin points. 4-3/16" OAL. **(USA)**
No. 758TW622.....$3.20

Fiber-filled plastic tweezers give gentle positive grip for die attaching. 4-3/8" long by 7/16" at body. **(USA)**
No. 758TW623.....$4.30

Glass-filled Delrin. Special thin, flat points. 4-3/8" OAL. **(USA)**
No. 758TW624 .....$3.20

Linear polyethylene. Acid-resistant, special thin flat points. 4-3/8" OAL. **(USA)**
No. 758TW625 .....$3.30

Soft green Delrin. 4-3/8" OAL. **(USA)**
No. 758TW626 .....$3.20

Glass-filled Delrin. Very pointed. 4" OAL. **(USA)**
No. 758TW627 .....$4.50

Fluorocarbon, acid resistant. Serrated point. 4-3/8" OAL. **(USA)**
No. 758TW628 .....$5.60

Carbon-filled polypropylene tweezer, conductive & static control. Popular type 3 shape. 4-1/4" OAL. (Switzerland)
No. 758TW475.....$2.45

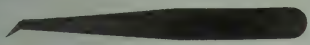
Angled tip with built-in stop for wafer handling. Glass-filled Delrin. Tips will not open when extra pressure is applied. 4-3/4" OAL. **(USA)**
No. 758TW629.....$4.05

TECHNI-TOOL High Purity Cleanroom Conductive Tweezers

The benefits of carbon fiber at a fraction of the price!
High performance, polyvinylidene fluoride reinforced carbon fiber tweezers feature high-heat capability up to 150°C. Reinforced to UV and nuclear radiation. Excellent chemical resistance to mineral and organic acid solvents. (Switzerland)

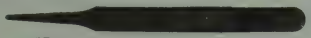
702ASV 4-5/8" OAL
No. 758TW702 .....**$8.31**

707SC 4-1/2" OAL
No. 758TW707 .....**$8.31**



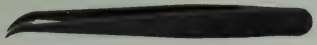
708SC 4-3/8" OAL
No. 758TW780 .....**$8.31**

709SV 4-5/8" OAL
No. 758TW790 .....**$8.31**



710SV 4-5/8" OAL
No. 758TW701 .....**$9.15**

705.SV 4-1/2" OAL
No. 758TW705 .....**$8.31**



707A.SV 4-1/2" OAL
No. 758TW706 .....**$8.31**

SAVE When you buy as a five piece set!
Includes 1 each: 758TW702, 758TW707, 758TW780, 758TW790, 758TW701.
No. 758TW777 .....**$41.02**

TECHNI-TOOL Stainless Steel Twipping Tweezers

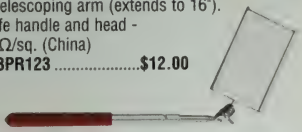
4mm vertical tip; 115mm OAL; components: 1.0mm. (Switzerland)
No. 758TW582 .....**$23.30**

6mm horizontal tip; 145mm OAL; components: 2.5-5.0mm. (Switzerland)
No. 758TW572 .....**$23.30**

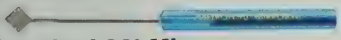
Global Reach + Local Focus = THE COMPLETE SOLUTION
TECHNI-TOOL

Mirrors/Pick-Up Tools

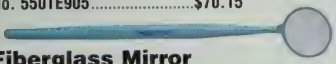
Rite-Site Mirror
This mirror presents you with a non-inverting image, making it easy to see and read, avoiding costly mistakes. **Features**: Optical-Quality glass prism encapsulated in a shock resistant plastic housing; convenient pocket clip; metal chrome-plated telescoping arm (extends to 16"). ESD safe handle and head - 10^8-$10^9\Omega$/sq. (China)
No. 683PR123 .....**$12.00**



Inspection Mirror
Ideal for inspection in inaccessible places. Extends to 15". Plastic coated handle with ball and socket joints. 3-1/2"L x 2"W. 19-1/4" OAL.
No. 400IE560 .....**$10.00**



Standard 90° Mirror
The Standard 90° Mirror is hand-held and designed for right or left hand use. It has two flat sides which join at a right angle. Either flat side may be placed at the PC Board-level directly beside the part you want to look under. Requires no tilting of the PC Board and components from one row can't block the view of the solder connections of the next row.
No. 550TE905.....**$70.15**



Fiberglass Mirror
Insulated with a strong FRP handle. 1" diameter (front surface) mirror creates no shadow. No metallic contact. Use on live circuits for safety. **Color:** Blue.
No. 758IE028 .....**$4.90**

Telescopic Mirror & Magnetic Pick-Up Tool
Mirror diameter 7/8". Extends out over 19-1/2" yet closes down to 5-5/8" pocket size.
No. 810IN062 .....**$7.73**

BGA 90° Inspection Mirror
Inspect the inside of a Ball Grid Array without the use of an x-ray. The BGA 90° Mirror is capable of inspecting the outer row of balls along with internal balls and spaces in the center of the assembly. **(USA)**
No. 550SO840 .....**$75.00**

Telescopic Mirror & Pick-Up Tool
All-Angle ball joint 7/8" diameter. Extends to 18", closes to 4-1/2".
No. 810IN013 .....**$6.00**

TECHNI-TOOL
Best Seller

Retractable Magnet
Determines whether metal is ferrous or non-ferrous. Picks up small metal parts. Anodized aluminum housing. **(USA)**
No. 758IE300 .....**$7.75**

TECHNI-TOOL
Can be used as a screwstarter, too!

Mini Mechanical Pickup Tool
Retrieves small objects from hard-to-reach places. Strong four-prong steel jaws grab objects up to 1/2". Knurled 4-3/4" x 1/4" body with tapered point for tight work areas.
No. 758IE388 .....**$5.25**

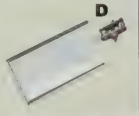
Magimmicks Magnetic Pocket Pick-Up Tool
Extends to 19-1/2", closes to 4-1/2" pocket size.
No. 810PR032.....**$6.42**

Ball Joint Mirrors
All-angle ball joint mirrors feature stainless steel mirror backs. Visual inspection of hidden areas. Double ball joint links swivel mirrors for viewing to 360°. Made of tempered spring steel to move freely and hold desired position. Replaceable mirrors.

A. Circular pocket mirror
7/8" diameter. 7-1/2" OAL.
No. 810IN012.....**$4.72**

B. Oval pocket mirror
1" x 2" diameter. 8-1/2" OAL.
No. 810IN018.....**$4.95**

C. Circular telescopic mirror
2-1/4" dia. 10" OAL extends to 14".
No. 810IN024.....**$7.23**



D. Rectangular telescopic mirror
2-1/8" x 3-1/2". 11-1/4" OAL extends to 15-1/4".
No. 810SC024 .....**$7.24**

Ullman Devices Corporation
LED-Lighted Inspection Mirror
2-3/8 LED lighted inspection mirror illuminates dark areas for perfect inspection. All-angle ball joint holds the lighted mirror head firmly at any angle. Stainless steel hand telescopes from 6-3/4" to 37". Cushion handle grip. Includes two lithium batteries.
No. 810IE012.....**$15.99**

TECHNI-TOOL Spring Hooks

For inserting, removing and adjusting fine springs in hard-to-reach areas. For precision work in production and maintenance of fine instruments. Tapered to fine point. **Case hardened steel, nickel plate.**

TECHNI-TOOL

General Purpose Puller: 7-1/4" OAL. **(USA)**
A. No. 758SP0028 .....**$2.20**

Spring Hook: Pull, 6" OAL. (India)
B. No. 758PR120.....**$1.60**

Adjusting Spring Tool: Pull, Stainless Steel. 6-1/2" OAL.
C. No. 758IE1860 .....**$3.31**

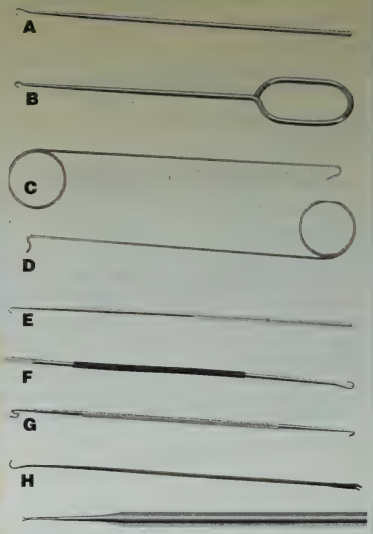
Adjusting Spring Tool: Push/Pull, Stainless Steel. 6-1/2" OAL.
D. No. 758IE1861 .....**$2.20**

Light Spring Tool: Pull. Steel, nickel plated. 7" OAL. (China)
E. No. 758PR853.....**$2.15**

Spring Hook: Pull and lifter, 8" OAL. (China)
F. No. 758SP026 .....**$3.95**

Spring Hook: Double ended, nickel finish, 7" OAL. **(USA)**
G. No. 758SP024.....**$3.25**

Spring Hook: Pull and lifter, knurled handle, 8" OAL. (India)
H. No. 758IE1850 .....**$1.65**



TECHNI-TOOL

Spring Hook Set - 8 pc

Handle with five different adapters and two extensions, all stainless steel. Adapters and handle are 4-1/2" long. The extensions, each 4" long, allow a maximum tool length of 16-1/2" when combined with handle and spring hook. **(USA)**
No. 758SP032 .....**$15.70**

MAYHEW TOOLS

Dominator® Hook and Pick Set - 4 pc

Patented 2-composite ergonomic handle provides comfortable and secure grip. Handle capped end allows user to strike without handle damage. Shaft is hardened and tempered the entire length for maximum durability and goes through handle for additional strength. **Includes:** Scratch awl; 90 degree hook; Curved hook; Complex hook. 1/4" round diameter; 10" OAL.
No. 544IE0000 .....**$53.59**

Dominator® Mini Hook & Pick Set – 4 pc
Includes: Scratch awl; 90 degree hook; Curved hook; Complex hook.
No. 544IE0003.....**$18.65**

TECHNI-TOOL

Wire Director

Special stainless steel director with no-nick notch to guide the finest wire. Great for placing wires in tight places. 6-1/4" OAL.
No. 758IE305 .....**$13.56**

TECHNI-TOOL

Utility Packing Hook

Magnetic pick-up in handle. For removing springs, wadding, washers, "O" rings, and prying stuck gaskets loose. 7" OAL.
No. 758SO410.....**$4.03**

TECHNI-TOOL

Fine Point Probe

Retractable, fine point in an anodized blue holder. 5-1/2" OAL
No. 758IE226 .....**$6.95**

Moody

Best Seller

Hook & Pick Set - 5 pc

For separating wires, removing small fuses and "O"-rings, and retrieving washers & loose parts too small to pick up with your fingers. Hex-shaped aluminum handle with powerful magnet on end. Four handy screw-in hook, pick, and scribe hardened steel points. Vinyl pouch. **(USA)**
No. 810PR004.....**$8.60**

Scribes

TECHNI-TOOL

Scribers

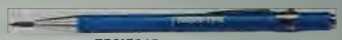
For machinist and electronic applications. Select from four different screw-in hardened steel points. Knurled handles are blue anodized aluminum with magnetic end. 7-3/4" OAL.

90° Point
A. No. 758IE1734 ..**$4.45**
Straight Point
C. No. 758IE1736 ..**$4.25**
Hooked Point
B. No. 758IE1735 ..**$4.45**
Angled Point
D. No. 758IE1737 ..**$4.45**

TECHNI-TOOL

Retractable Scribers

Quality anodized aluminum housing with easily removed tips. **(USA)**



758IE215

Scriber with Hardened Steel Tips
No. 758IE218 ....**$5.90**
Scriber with Carbide Tips
No. 758IE215 ....**$8.50**
Replacement Carbide Tips
No. 758IE214 ....**$3.45**
Scriber with Diamond Tips
No. 758IE222 ..**$11.15**
Replacement Diamond Tips
No. 758IE221.....**$7.15**

Moody

Shirt Pocket Scriber

Carbide-tipped, reversible pocket scriber with chuck-type nose and strong pocket clip. Magnet mount on clip end. 5-1/2" OAL. **(USA)**
No. 580PR028 Carbide tip w/magnet **$7.85**

Tungsten Carbide Pocket Scriber

All-in-one. "Push-Click" safety cover. Magnetic pick-up. 5-3/8" OAL. **(USA)**
No. 810PR018 .....**$7.14**

GENERAL

Machinists' Scribers

Three interchangeable points: one short straight, one short bent, and one long bent point. 12" OAL. **(USA)**
No. 400PR090 .....**$4.64**

TECHNI-TOOL

Machinists' Scribe

One straight and one bent point. Hardened points.
No. 758IE1510 8" OAL **$2.85**

GENERAL

Needle-Point Scriber

Replaceable point is held rigid in friction grip. Four extra needle points in handle. 5"OAL.
No. 400PR166 .....**$4.46**

LEATHERMAN® Multi-Tools

• 25-Year Guarantee! • 100% Stainless Steel • Made in the USA of US and Foreign Components

A. Skeletool™

***OAL:** 4" (10 cm) **Weight:** 5 oz.*

Only the most necessary features are included, because sometimes that's all you need. Removable pocket clip means it easily clips onto a belt, pack, or vest.

No. 506PL0845 ..... **$67.38**
No. 506PL0948 *w/Nylon Sheath* **$70.00**

B. Skeletool™ CX

Same as above with Tungsten-coated carbon fiber handles and serrated knife blade.

No. 506PL0849 ..... **$89.25**
No. 506PL0950 *w/Nylon Sheath* **$91.88**

C. Kick™

***OAL:** 4" (10 cm) **Weight:** 5.2 oz.*

Efficiency is the name of Kick's game! Thoughtful engineering means blades are longer, sharper, stronger. Kick has the same super-strong pliers as larger Leatherman tools, but its narrow shape and light weight keep you moving.

No. 506PL0016 *w/Leather Sheath* **$33.43**
No. 506PL0017 *w/Nylon Sheath* **$33.43**

D. Blast™

***OAL:** 4" (10 cm) **Weight:** 6.9 oz.*

Loaded with the most requested features! Longer blades mean easier slicing, sawing, filing and more. New designs for the handles and pliers help sustain more squeezing load.

No. 506PL0030 *w/Leather Sheath* **$56.44**
No. 506PL0031 *w/Nylon Sheath* **$56.44**

E. Core™

Best Seller

***OAL:** 4.5" (11.5cm) **Weight:** 10.8 oz.*

One solid tool for your toughest jobs. Stainless steel body with bronze and steel bushings. Powerful tool has new pliers, longer blades and easy-to-use locks.

No. 506PL0144 *w/Leather Sheath* **$66.50**
No. 506PL0145 *w/Nylon Sheath* **$66.50**

F. Wave®

Best Seller

***OAL:** 4" (10 cm) **Weight:** 8.5 oz.*

Larger knives, stronger pliers, longer wire cutters and all-locking blades make the new Wave an essential piece of equipment for most any job or adventure.

No. 506PL0037 *w/Leather Sheath* **$86.80**
No. 506PL0038 *w/Nylon Sheath* **$86.80**

G. Surge™

***OAL:** 4.5" (11.5cm) **Weight:** 12.5 oz.*

A multi-tool powerhouse with tough new pliers, longer blades and easy-to-use locks. 4 outside-opening blades give you quick access to the tools you use most.

No. 506PL0158 *w/Leather Sheath* **$100.80**
No. 506PL0159 *w/Nylon Sheath* **$100.80**

H. Charge® AL

***OAL:** 4" (10 cm) **Weight:** 8.4 oz.*

Includes scissors that slice through just about anything with beveled edges that allow them to get close to whatever you're cutting, for a clean trim every time.

No. 506PL0662 *w/Leather Sheath* **$123.38**
No. 506PL0663 *w/Nylon Sheath* **$123.38**

I. Charge® ALX

***OAL:** 4" (10 cm) **Weight:** 8.3 oz.*

The aggressive cutting hook on the back of the serrated blade cuts through tough materials like seatbelts, linoleum and leather with no problem.

No. 506PL0674 *w/Leather Sheath* **$123.38**
No. 506PL0675 *w/Nylon Sheath* **$123.38**

J. Charge® TTi

***OAL:** 4" (10 cm) **Weight:** 8.2 oz.*

The Charge AL and ALX were just too hard to beat, so we didn't even try - we simply combined them. All this with comfort-sculpted titanium handles and stainless steel clip point knife.

No. 506PL0682 *w/Leather Sheath* **$145.60**
No. 506PL0683 *w/Nylon Sheath* **$145.60**

Leatherman® Multi-Tools Reference Chart

	All-Locking Blades	Awl w/Thread Loop	Bit Driver - Large	Bit Driver - Small	Bit Storage Handle	Bits - Two Double Ended	Blade Exchanger	Bottle/Can Opener	Carabiner	Clip Point Knife	Diamond File Blade	Electrical Crimper	Eyeglass Screwdriver	Hex 1/16" and .050"	Hex 1/8" and 7/64"	Hex 5/32" and 5/64"	Knife Blade, Serrated	Knife Blade, Straight	Lanyard Attachment	Needlenose Pliers	One Double-Ended Bit	Phillips #1 and #2	Regular Pliers	Removable Pocket Clip	Robertson #2 and #3	Ruler	Saw Blade	Scissors	Screwdriver - Large	Screwdriver - Phillips	Screwdriver - Small	Screwdriver 1/4"	Screwdriver 1/8"	Screwdriver 3/16"	Screwdriver 5/16"	Torx #15	Torx #25	Universal Bit Driver	Wire Cutters - Hard	Wire Cutters - Standard	Wire Strippers	Wood/Metal File
A. Skeletool™					•		•	•									•		•		•	•	•							•		•					•	•				
B. Skeletool™ CX					•		•	•									•	•	•		•	•	•							•		•					•	•				
C. Kick™							•		•									•	•			•			•			•	•	•								•		•		
D. Blast™				•			•		•			•						•	•	•		•			•	•	•	•	•	•								•		•	•	•
E. Core™	•	•					•		•		•						•	•	•			•			•	•			•			•		•		•	•		•	•	•	•
F. Wave®			•	•		•	•		•	•		•					•	•	•		•	•			•	•	•	•				•							•		•	•
G. Surge®	•	•	•	•		•	•	•	•	•	•	•					•	•	•		•	•			•	•	•					•	•						•	•	•	•
H. Charge® AL			•	•				•		•	•		•	•	•	•	•	•	•		•	•	•	•		•	•	•				•				•			•		•	•
I. Charge® ALX			•	•				•		•	•	•		•	•	•	•	•	•		•	•	•	•		•					•	•	•			•			•		•	•
J. Charge® TTi			•	•				•		•	•	•	•	•	•	•	•	•	•		•	•	•	•		•	•	•				•				•			•		•	•

Paladin Multi-Tools

Paladin Tools

PowerPlay™ The Multi-Tool for Cable Pro's

Designed specifically for telecomm installers and electricians with just the tools they need. Crafted from stainless steel, features one handed opening and patented compound leverage plier head for twice the gripping and cutting power. ***Lifetime-Warranty.***

For datacom, telecom and electrical professionals

PowerPlay® PT-540

Length closed: 5"; Length open: 7.5"

- Needlenose & Gripping Pliers
- Wire Hook & Spudger
- 66 & 110-Style Punchdown Tools
- Hard Wire Cutter Notch
- Round Wire Stripper for UTP
- 10-24 AWG wire stripper
- 18-24 AWG Insulated Lug Crimper
- 18-14 AWG Non-Insulated Lug Crimper
- Wire Cutters (even cuts 10 AWG Romex)
- 1/4" Socket Driver - Hex Bit Adapter Included!
- Slotted #4 & #6 Screwdrivers
- Phillips #1 Screwdriver
- 7/16" and 3/8" Nut Drivers in Handle
- SOG Knife with 1/2 serrated blade
- 3-In-1 File
- Scissors
- Drywall Punch & Saw
- Bottle opener
- Ruler (English & Metric)
- Lanyard
- Leather Sheath Included

No. 618PL6520 .....$124.99

618PL6520

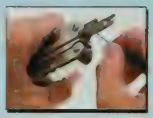
Punch, Strip, Crimp and So Much More!

PT-525 - *5" x 0.75" x 1.33"*

- Wire Cutter (Cuts up to 12 AWG Romex)
- Round wire stripper for UTP
- Drywall Saw
- 12 AWG Wire Stripper
- 18-24 AWG Wire Stripper
- Wire Hook & Spudger
- 66 Style Punchdown Tool
- Drywall Punch
- Needlenose Pliers
- Gripping Pliers
- Hard Wire Cutter Notch
- 110 Style Punchdown Tool
- Phillips #1 Screwdriver
- Slotted #4 Screwdriver
- Slotted #6 Screwdriver
- Bottle Opener
- SOG knife with 1/2 Serrated Blade
- 3-in-1 File
- Ruler (English & Metric)
- Lanyard
- Leather Sheath

No. 618PL6510 .....$89.99

618PL6510



618PL6510

18 tools-in-one!

PT-510

4" x 0.5" x 1.25"

- Drywall Punch
- Needlenose Pliers
- Gripping Pliers
- 18-24 AWG Wire Stripper
- Wire Cutter up to 4 pair UTP Cat5e
- Hard Wire Cutter Notch
- 110 Style Punchdown Tool
- Phillips #1 Screwdriver
- Slotted #4 Screwdriver
- Slotted #6 Screwdriver
- Bottle Opener
- SOG knife with 1/2 Serrated Blade
- 3-in-1 File
- Ruler (English & Metric)
- Lanyard
- Leather Sheath

No. 618PL6500.....$49.99

618PL6500

Heat Shrink Tubing Kits

TECHNI-STAT

Conductive Heat Shrink Tubing Kit - 42 pc

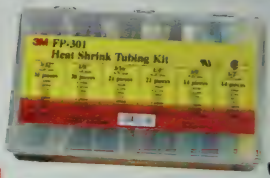
R-46846 polyolefin tubing with a highly conductive polymer thick film silver inner diameter coating. Coating shrinks with a heat gun or any other conventional heat source. Connectors are entirely coated on their inner surface providing not only electrical continuity, but EMI, RFI, and ESD shielding around the joints being connected. **Includes:** (12) 1/4", (12) 3/8", (9) 1/2", (5) 3/4", and (4) 1". Conductivity: Resistance is approx. 1 /in; *Meets ASTM E-595, NASA, SPR-0022A and ESA PSS-01-702; High frequency shielding needs: Commercial: 30-60 dB; Military: 60-90 dB.* **(USA)**

No. 758ST334 .....$110.00

Thin Wall Heat Shrink Tubing Kit - 86 pc

Length assortment includes: 36 black (I.D.: 0.187" Exp/.073" Rec.);24 White (I.D.: .a Exp/.125" Rec.); 12 Red (I.D.: .325" Exp/.187"Rec.); Six black (I.D.: 5" Exp/.25"Rec.); Four white (I.D.: 75" Exp/.375"Rec.); four red (I.D.: 1.0" Exp/.50" Rec.). All 4" OAL. **(USA)**

No. 104PR8658 .....$26.78



3M 6" Tubing Kits

Versatile assortment of flexible polyolefin heat shrink tubing for a variety of electronic and electrical applications. Each kit is packaged in a plastic box. **(USA)**

Color kit contains 133 pcs., in sizes ranging from 3/32" to 1/2", and seven colors.

No. 105PR577 (FP-301 Kit Asst).....**$67.00**

Black kit contains 124 pcs., in sizes ranging from 3/16" to 1 inch.

No. 105PR317 (FP-301 Kit BLK) **$67.00**

Polyolefin Heat Shrinkable Tubing

Packed in convenient 96' spools. Just apply heat with a hot air gun. The expanded tubing shrinks at 125°C temp. Withstands 600 volts. UL recognized.

TT No.	Expanded ID	Color Code	Shrinks to (approx.)	PRICE
356PR114	1/8'	Red	1/16'	$6.62
356PR116	1/4'	Blue	1/8'	$7.35
356PR117	5/16'	Yellow	5/32'	$7.62

Weller

Model 6966C Heat Gun

Designed for assembly & repair applications. Delivers 750°F - 800°F hot air at nozzle or ambient air. Comes complete with four attachments. (A, B, C and D) **Specs:** 120V AC, 60Hz., 2.2 amps, 3-wire grounded plug, 6' cord.

No. 812PR010 120VAC **$143.36**

Accessories for 812PR010

A. No. 812IR132 1/2" reflector **$2.61**
B. No. 812IR134 1-1/2" reflector **$2.77**
C. No. 812SO032 Reducing baffle **$4.91**
D. No. 812SO034 1/8" Precision reflector **$9.76**

Weller

Model 6970HD Heat Gun

Two speed and two heat settings give the 6970HD the ability to handle heavy-duty jobs and withstand long and constant use. Ideal for curing epoxy and heat shrinking applications. 120V AC, 3-wire grounded plug, 6' cord, Dual Temp: 1000°F (750W) and 700°F (350W).

No. 812PR6970 .....**$94.21**

Weller

Model 1095 Heat Gun

Rugged design with high and low temperature settings. 1000 watts (maximum), 120V AC, 60Hz., 3-wire grounded, 790°F - low, 1200°F - high.

No. 812PR1095 .....**$58.61**

STEINEL New!

Heat Blower

Lightweight yet powerful heat blower with soft grip handle and quiet operation. Five interchangeable temperature keys lock-in output ranges. Can be used for hand held operation. **Specs:** Temperature Range: 200°-1200°F; Output Watts: 1750; Airflow CFM: 23; Weight: 2.4 lbs. 120 VAC. **Includes:** 90° adjustable quick-lock stand with key storage.

A. No. 737SO750 (HB1750) ..**$169.99**

7mm Reducer Nozzle
B. No. 737SO695.....**$24.99**

200mm Spreader Nozzle
C. No. 737SO725.....**$49.99**

Large Reflector Nozzle
D. No. 737SO705.....**$19.99**

Small Reflector Nozzle
E. No. 737SO715 .....**$14.99**

STEINEL

UltraHeat™ II Heat Gun Kit

Features two airflow settings with heat to 1050°F and cool air to 140°F for maximum control. Reinforced heating element tested for twice the life of comparable tools. Soft grip handle. **Specs:** Output: 1400W; Voltage: 120 VAC/60Hz. **Includes:** SV803 heat gun; 75mm spreader nozzle; 39mm reflector nozzle, heavy-duty carrying case.

One-Year Warranty.

No. 737SO803 (SV803K) **$77.33**

STEINEL

Variable Temperature Electronic Heat Gun

Powerful with variable temperature and electronic thermocouple control for flexible use and pinpoint reduction of heat output. DuraTherm™ heating element ensures long life and even heat. **Specs:** Temperature: 120°-1100°F; Airflow 3.6/10.6/17.6 CFM; 3-position temperature/airflow switch; Output: 1500W; Voltage: 120VAC/60Hz.

One-Year Warranty.

A. No. 737SO910 (HL 19I0E) **$227.81**

Programmable Intellitemp™ Heat Gun With LCD Display

Programmable heat gun with LOC Lockable Override Control™ of temperature and airflow output settings. LCD display enables temperature selection in 10°F increments. **Specs:** Temperature: 120°-1200°F; Airflow Continuously variable 3.6-17.6 CFM; Switch: Cool air stage, Variable Temp & Airflow; Output: 1600W; Voltage: 120VAC/60Hz.

One-Year Warranty.

B. No. 737SO310 (HG 2310LCD) **$271.41**

Nozzles for Electronic Heat Guns

No. 737SO062 14mm Reflector **$15.81**
No. 737SO051 39mm Reflector **$13.63**
No. 737SO026 9mm Reducer.....**$13.63**

MASTER

Best Seller

Master-Mite® and Master-Mite® ESD Heat Guns

High-impact "Noryl®" housing. Brushless, shaded pole, continuous-duty motor. Three-wire grounded cord set. Slip-on heat-shrink deflector attachment and 650°F element standard.120V; 4.5A; 475W; 3.8 CFM. **(USA)**

No. 542PR012 .....**$88.00**

220V Version: 50/60Hz; 2A; Wt. 2.2 lbs.
No. 542PR014 .....**$91.00**

ESD Version: Surface resistance of less than 500Ω/sq. helps shield against EMI and RFI.
No. 542SO112 .....**$141.00**

Master-Mite® Attachments

Deflector attachment. Slide-on deflector encapsules shrink tubing with even heat distribution.
No. 542PR058 .....**$7.95**

1/4" Pinpoint attachment, concentrates heat exactly where you want it.
No. 542PR060 .....**$13.95**

Solder sleeve attachment
No. 542PR040 .....**$24.95**

Snap-in 120V Replacement Elements

Temp: 500°F/260°C; Watts: 340; Color: Blue.
No. 542PR020.....**$27.60**

Temp: 650°F/343°C; Watts: 475; Color: Silver.
No. 542PR022.....**$27.60**

Temp: 800°F/427°C; Watts: 525; Color: Black.
No. 542PR024.....**$27.60**

Master® Heat Gun®

The perfect flameless, electric heat tool for hundreds of electronic/industrial uses: Shrink tubing; Activate adhesives; Melt solder preforms; Heat shrink packaging; Soften floor covering; Strip paint and varnish; Desolder; Defrost freezer coils and repair and install vinyl. **Features:** Powerful universal motor provides strong airflow at 23 CFM to get the job done fast; Heavy-duty industrial, adj base. Models with temps up to 1000°F/538°C *(See below)*. Adjustable air intake controls output temperature and air volume. Reinforced ceramic heating element. Rugged, die-cast aluminum housing with externally replaceable carbon brushes. Three-wire oil resistant cord set. **(USA)**

Temp: 200-300°F/93°-149°C; 600 Watts
No. 542PR192 120V, 5A **$119.00**
No. 542PR194 230V, 3A **$123.00**

Temp: 300-500°F/149°-260°C; 1440 Watts
No. 542PR196 120V, 12A **$119.00**
No. 542PR198 230V, 6A **$123.00**

Temp: 500-750°F/260°-399°C; 1680 Watts
No. 542PR200 120V, 14A **$119.00**
No. 542PR202 230V, 7A **$123.00**

Temp:750°-1000°F/399°-538°C; 1740 Watts
No. 542PR204* 120V, 14.5A **$119.00**
No. 542PR206* 220/240V, 9A **$123.00**

** DO NOT USE 542PR214 WITH THESE UNITS!*

Master® Heat Gun® Attachments

1/4" Pinpoint attachment
No. 542PR214* **$12.95**

Solder sleeve attachment
No. 542PR042 .....**$12.95**

Shrink tubing up to 3/4" O.D.
No. 542PR142 .....**$12.95**

Shrink tubing from 3/4" to 2" O.D.
No. 542PR144 .....**$12.95**

120 Volt Models

Proheat® VariAir®

Easily adjustable infinitely variable temperature and airflow, 130°F to 900°F at 6 to 15 CFM with electronic closed loop control system to maintain temperature at any setting with any attachments. 120 V, 11A. **(USA)**

Heat Gun Only
No. 542SO130.....**$183.00**
VariAir® Kit: Heat Gun; 5 Attachments; Case
No. 542SO135.....**$239.00**

Proheat® Varitemp®

Infinitely variable temperature 130°F to 840°F at 15 CFM. Electronic closed loop control system to maintain temp at any setting, with any attachments. 120V, 11A. **(USA)**
No. 542PR120 .....**$149.00**

Master® Proheat® Heat Gun

Two settings of 430°F and 840°F at 15CFM. Three position rocker switch. 120V, 6A & 11A. **(USA)**
No. 542PR100* **$89.00**
No. 542PR201* (220V) **$99.00**

Proheat® Attachments/Accessories

Shrink attachment
No. 542AC017 .....**$12.95**

Connector reducer
No. 542SO292* **$10.95**

Reducer attachment
No. 542SO293 .....**$10.95**

Bench stand
No. 542AC216 .....**$11.95**

120 Volt Models

TEMPERATURE CONTROL AIR FLOW CONTROL

 ** DO NOT USE 542SO292 WITH THESE UNITS!*

MASTER

VariTemp® Heavy-Duty Heat Gun

Professional, industrial quality multi-use heat gun allows you to lock in variable temperature settings up to 1000°F (540°C). 1740 watts. Powerful universal motor provides strong airflow at 23 CFM to get the job done fast. Accommodates many industrial and commercial heating applications. Rugged die cast aluminum housing. Includes non-slip stand. 120V, 14.5A. **(USA)**

No. 542PR208 .....$172.00

VariTemp® Heavy-Duty Heat Gun Kit

Includes: VariTemp® heat gun, Shrink, Spreader, Reducer Attachments, Storage Case.

No. 542SO753 .....$209.00

MASTER

Ecoheat®

Economical, low-cost, entry-level, multi-use heat gun is perfect for industrial and commercial applications. Automatic resettable thermostat prevents overheating. Use to activate adhesives, bend plastics, loosen rusted fittings, melt solder, shrink plastics, tubing and more. **Features:** Two fan speed - high and low; two heat settings 500° & 1,000°; built-in hand guard; 3-Wire grounded cord set; and built-in stand. 500° & 1000°F (260° & 399°C), 120V, 10A, 1200W, 8 CFM, 1020 FPM. (China)

No. 542PR351.....$46.00

Ecoheat® Heat Gun Kit

Includes: Heat Gun; 7/8" Air Reducer Attachment; 1" Shrink Tubing Attachment; 1-15/16" and 3-1/8" Spreader Attachments and carrying case.

No. 542SO027.....$59.00

Milwaukee

Heavy-Duty Heat Gun

Dual temperature (570° and 1000°F) with 3-position rocker switch. Soft air velocity increases and maintains surface temperature faster than conventional heat guns. Impact resistant heating element. **Specs:** 120 VAC; 11.6 amps; 14.8 cu. ft./min. air volume. Includes support stand.

A. No. 575SO897 .....$91.20

Heavy-Duty Heat Gun Kit

Same as above plus accessory assortment and case

B. No. 575SO8980 .....$156.80

HAKKO

HJ5000 Heat Gun

Features switchable dual temperatures of 600°F (316°C) or 950°F (510°C). Designed for intermittent use in such applications as curing epoxy and heat shrinking.

Specs: Voltage: 120 VAC, 60Hz; Output: 1300 watts. **(USA)**

No. 821SO5000.....$39.97

IDEAL

Heat Elite Heat Guns

Three different models allows you to select the heat gun that best meets your application. All models have been ergonomically designed for maximum comfort.

Heat Elite

- Dual temperature range: 660°F/960°F
- Two-step on/off temperature and airflow control switch
- **Includes:** Small deflector, Wide-slot adapter and custom case.

A. No. 462SO202.....$77.15

Heat Elite Pro

- Variable temperature range: 180°F-1020°F
- Step-less temperature adjustment dial
- Two-step on/off temperature and airflow control switch
- **Includes:** Small deflector, Reduction adapter; Wide-slot adapter and custom case.

B. No. 462SO203 .....$149.67

Heat Elite Plus LCD

- Programmable temperature range: 180°F to 1200°F
- Temperature and airflow independently controlled by LCD digital terminal
- Seven preset application functions for shrinking, forming, welding, soldering, paint stripping, drying and manual operation
- **Includes:** Small deflector, Welding adapter, Solder reflection adapter, Overlap welding adapter, pressure roller and custom case.

C. No. 462SO204.....$191.79

Best Seller

TWC-1 Stripall® Plus with Temperature Control

Same handheld unit with solid state adjustable temperature control. Blades heat from 100°F to 1700°F in 2 seconds and cools instantly. Controller mounts at electrical outlet. Accommodates high and low melt insulations on 10 to 36 AWG. Great for Teflon, Kapton, Kynar, Nylon, Vinyl and more. Removes a variety of insulation types up to 1.5", from single, multi-strand and shielded wire. (Stand Included). **(USA)**

No. 768ST040 117 VAC **$353.15**

No. 768ST042 220 VAC **$387.15**

TWC-1 ESD Version Stripall®
Case and power cord meets ASTM Standards. 120 VAC. (Stand Included). *(Not Shown)* **(USA)**
No. 768ST001 .....**$406.10**

Replacement Blades
Unnotched (26 gauge and smaller)
No. 768ST016.....**$7.65/Pr.**
Notched (24 gauge and larger)
No. 768ST018.....**$7.65/Pr.**

Best Seller

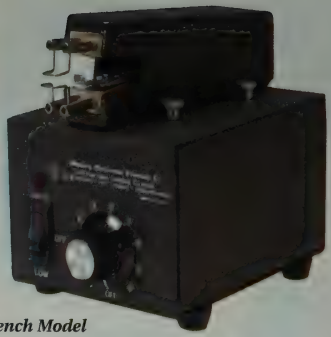
TW-1 Stripall® Plus Thermal Wire Stripper

This hand held "Plug-N-Go" unit is completely self-contained with adjustable stops for both wire gauge and strip length. (Stand Included). **(USA)**
No. 768ST026 117 VAC **$277.45**
No. 768ST028 220 VAC **$311.45**

TWC-2 Long Nose ESD Version Stripall®

Includes: long nose Stripall®, temperature control and table bench mount. (Stand Included). **(USA)**
No. 768ST002 .....**$374.35**

TW-2 Long Nose Stripall®
Strips up to 3-1/2" in single strip. (Stand Included). *(Not Shown)* **(USA)**
No. 768PL112 117 VAC **$298.65**



Bench Model Or Hand Tool!

Thermal Wire Stripper

No blades to cut or nick wire. Strips Teflon. Continuously variable heat control. Capacity: No. 12 AWG to No. 36 AWG. Parallel heated tips. Max. strip length 1"- Adjustable. *NSN# 5130-00-996-9389*
No. 878ST048 .....**$325.00**
Replacement Tips
No. 878ST044 .....**$30.00/doz.**

Best Seller

HAKKO

FT-800 Thermal Wire Stripper

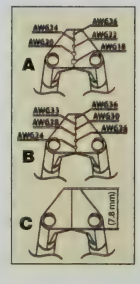
Strips a wide variety of wire insulations. Blades heat up to 1472°F (800°C) and are easy to replace. Two lead adjusters allow repeatable wire strip lengths from 1/32"-1-1/2" (1-38 mm). A power save mode extends blade life by reducing the temperature 50% when handpiece is in holder. **Specs:** Temperature range: Approx 392 to 1472°F (200 to 800°C). *Blades sold separately.*
No. 821PL850 .....**$299.97**

FT-800 Thermal Wire Stripper Blades

Angled Notched 18-26 AWG
A. No. 821PL603 ....**$119.97**

Angled Notched 24-36 AWG
B. No. 821PL604 ....**$119.97**

Angled Straight Blade
C. No. 821PL605 ....**$119.97**



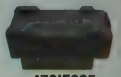
479IE125

New!

JONARD INDUSTRIES CORP

Thermal Fiber Optic Strippers

Compact, low maintenance benchtop stripper is easy-to-use to thermo-mechanically remove coatings from optical fibers. Adjustable temperature range from 60° to 200°C lets you strip extremely difficult and baked-on coatings and fluoroacrylate undercoatings. Fixed blade model supports standard 120µm optical fibers, including 250µm, 400µm and 900µm coated fibers. Precision self-centering blade produces high strength stripping. Adjustable blade model is designed for optical fibers with cladding diameters of 40µm to 1000µm, with buffer diameters up to 1200µm. Both models can be used with variety of platforms and clamps.



479IE225

479IE325

479IE140

Fixed Blade Stripper
No. 479IE125 ..**$2,060.00**

Adjustable Blade Stripper
No. 479IE040 ..**$2,246.70**

Ericsson Style Platform
No. 479IE225.....**$166.67**

Fitel/Fujikura Style Platform
No. 479IE325.....**$166.67**

Jonard's Universal Clamp
No. 479IE140.....**$226.67**

IDEAL

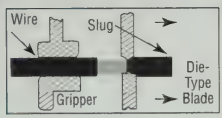
STP Jacket Remover

Removes the outer jacket of shielded twisted pair (STP) cables. Compact and user-friendly pneumatic operation strips up to .250" diameter. Partial strip mode slides the outer jacket up to .250" creating a window strip application. **Features:** Partial strip mode; Easy-view wire entry port; Deep storage tray; Removes insulation jacket up to .250" min. to a 4.5" slug length. Capable of removing up to 6" max. slug length with an additional operation. Compact bench top design.
No. 462PL910 .....**$2,031.49**

Replacement Gripper Pads
No. 462PL2415 .....**$16.30/Set**

IDEAL Stripmaster® Strippers

Best Sellers



Custom Stripmaster® and Custom Stripmaster® Lite

Die-type MIL-spec blades allow precision stripping. Counter-bored holes sized to insulation; inner spring hole sized to conductor. Tool centers conductor to prevent unwanted conductor contact. Cushioned handles. Custom Stripmaster strips 10-30 AWG solid or stranded wire. Lite version is 1/4 smaller, requires 1/3 less hand pressure, strips 16-30 AWG solid or stranded wire.

Wire Size - AWG	Product	TT No.	PRICE	Replacement Blades - pair	PRICE
For Type E Teflon 660V					
10-14	Custom	462PL5176	$175.12	462PL5559	$79.59
16-22	Lite	462PL5638	$175.12	462PL0918	$79.59
16-26	Custom	462PL5177	$175.12	462PL5562	$79.59
20-26	Lite	462PL5639	$175.12	462PL0919	$79.59
24-30	Lite	462PL5640	$175.12	462PL0920	$79.59
26-30	Custom	462PL5178	$175.12	462PL5561	$79.59
For Type EE Teflon 1000V					
10-14	Custom	462PL5173	$175.12	462PL562	$79.59
16-22	Lite	462PL5635	$175.12	462PL915	$79.59
16-26	Custom	462PL5174	$175.12	462PL5563	$79.59
20-26	Lite	462PL5636	$175.12	462PL0916	$79.59
24-30	Lite	462PL5637	$175.12	462PL0917	$79.59
26-30	Custom	462PL5175	$175.12	462PL5564	$79.59
For other insulations					
10-14	Custom	462PL5170	$175.12	462PL5210	$79.59
16-22	Lite	462PL5632	$175.12	462PL0912	$79.59
16-26	Custom	462PL5171	$175.12	462PL5211	$79.59
20-26	Lite	462PL5633	$175.12	462PL913	$79.59
24-30	Lite	462PL5634	$175.12	462PL914	$79.59
26-30	Custom	462PL5172	$175.12	462PL5436	$79.59
Optional Parts	**Description**			**TT No.**	**PRICE**
Short-Stop Latch	Protects wire strands by limiting stroke to 5/32"			462PL5269	$9.79
Wire Stop	Provides uniform stripping up to 1-1/8"			462PL5270	$7.01

Stripmaster® and Stripmaster® Lite

Uses precision-ground knife-type blades. Strips in one step. Spring-action motion increases leverage, reduces fatigue. Stripmaster strips 8-30 AWG wire. Lite version is 1/4 smaller, requires 1/3 less hand pressure, strips 16-24 AWG wire.

Wire Size - AWG	Product	TT No.	PRICE	Replacement Blades - pair	PRICE
8-12	Stripmaster	462PL5090	$36.68	493PL196	$33.02
10-18	Stripmaster	462PL5091	$36.68	493PL198	$31.37
10-22	Stripmaster	462PL5092	$36.68	493PL200	$29.63
14-22	Stripmaster	462PL5093	$36.68	493PL202	$13.87
16-22	Lite	462PL5671	$49.03	462PL1001	$13.87
16-26	Stripmaster	462PL5097	$36.68	462ST212	$13.87
20-30	Stripmaster	462PL5098	$36.68	462ST230	$12.78
24-30	Lite	462PL5672	$49.03	462PL1002	$13.87
Optional Parts	**Description**			**TT No.**	**PRICE**
Short-Stop Latch	Protects wire strands by limiting stroke to 5/32"			462PL5269	$9.79
Wire Stop	Provides uniform stripping up to 1-1/8"			462PL5270	$7.01

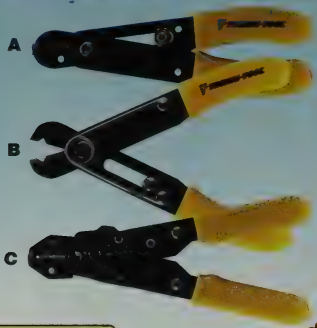
Ergo-Elite Stripmaster®

ERGONOMIC DESIGN

Features new Die-type Mil-Spec precision blades with revolutionary, patented design. Tilted head allows unobstructed view of wire for precise positioning. Ergonomic design, weighs 40% less than other Stripmasters. Grips and strips in one step.

Wire Size - AWG	Product	TT No.	PRICE	Replacement Blades - pair	PRICE
10-26	Ergo-Elite	462PL1987	$224.35	462PL5519	$152.95

UNMATCHED PRODUCT SELECTION
FROM MORE THAN 500 TOP MANUFACTURERS



ECONOMY

New!

Wire Strippers/Cutters

Adjustable screw stop for different wire sizes. Cushion grips. cleanly and neatly cuts and strips both solid and stranded wire. Hardened with ground blades. Up to 10 AWG. 5" OAL. (Taiwan)
A. No. 758PL041.....**$4.60**

Same specs as above except with spring-equipped, self-opening handles
B. No. 758PL042.....**$4.80**

Unique cam-stop adjustment for different wire sizes. Fine for industrial use. Up to 10 AWG. 5-1/4" OAL.
C. No. 711PL004.....**$6.40**

SD
Standard-Duty

Strippers/Cutters

8-16 AWG (1.3-3.3mm) **(USA)**
A. No. 758PL0300 .....**$8.40**

10-20 AWG (0.8-2.6mm) **(USA)**
B. No. 758PL0500 .....**$8.40**

16-26 AWG (0.4-1.3mm) **(USA)**
C. No. 758PL0600 .....**$8.62**

22-30 AWG (0.25-0.65mm) **(USA)**
D. No. 758PL0700 .....**$8.62**

HD
HEAVY-DUTY

Strippers/Cutters

Features a two-piece hardened steel pivot for lifetime service.10-20 AWG (0.8-2.6mm) **(USA)**
A. No. 758PL0031 .....**$9.36**

16-26 AWG (0.4-1.3mm) **(USA)**
B. No. 758PL0032 .....**$9.58**

22-30 AWG (0.25-0.65mm) **(USA)**
C. No. 758PL0033 .....**$9.58**

For copper wire to 10 AWG & fine stranded cable **(USA)**
D. No. 758PL0037 .....**$9.58**

Strippers

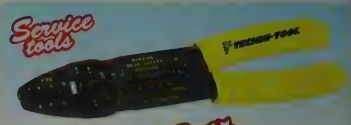
Long curved cutting blade and ergonomic handles generate greater leverage for easier cutting. **(USA)**

10-20 AWG; Bolt Cutter: 6-32/8-32; 7-1/4" OAL
A. No. 758PL0056 .....**$13.46**

20-30 AWG; Bolt Cutter: 6-32/8-32; 7-1/4" OAL
B. No. 758PL0066 .....**$13.68**

Hand Crimp Service Tool

Use with insulated and uninsulated terminals and lugs. Crimp 14-22, 10-12 AWG. Ignition crimp for applying 7mm insulation and/or conductor-piercing, lance-type terminals. 8-3/4" OAL. **(USA)**
No. 758TT016 .....**$18.30**



Standard Service Tool

Best Seller

Crimps all pin & socket contacts, crimps solderless flag terminals 10-22 AWG, cuts bolts. Air pocket cushioned handles. Open and closed barrel. 8-3/4" OAL. **(USA)**
No. 758TT004 .....**$42.48**

6-in-1 Multi Service Tool

Strips 12/14/16/18/20-22 AWG. Crimps 14-22, 10-12; Cuts bolts 4-40/6-32/8-32/10-32/10-24 in. **Includes:** anvil-type wire cutter and air pocket cushion grips. 7-1/2" OAL. **(USA)**
No. 758TT018 .....**$16.70**

Super 5-in-1 Combination

Includes: 6 up-front, precision-ground stripping stations for solid and stranded wire; wire cutter; 6 bolt/screw sizing and cutting stations; wire terminal and 7-8mm automotive ignition crimp stations. Long, cushioned handles. Stripper: 10-22 AWG; Crimper: 10-22 AWG insulated, 10-22 AWG and 7-8mm Auto non-insulated; Bolt cutter: 4-40/5-40/6-32/8-32/10-32/10-24. 8-1/4" OAL. **(USA)**
A. No. 758PL046 .....**$18.96**

5-in-1 Combination Metric

Same features as the Super 5-in-1 Combination with metric and standard units.
Stripper: 0.75-6.0mm (10-22 AWG);
Crimper: 1.5-6.0mm (10-22 AWG) insulated, 1.5-6.0mm, 10-22 AWG, 7-8mm Auto non-insulated;
Bolt cutter: 2.6/3.0/3.5/4.0/4.5/5.0mm. **(USA)**
B. No. 758PL021 .....**$20.24**

Upfront Cutter/ Crimper/Strippers

Anvil-type wire cutter at nose of pliers. Stripper: 10-22 AWG; Crimper: 10-22 AWG insulated, 10-22 AWG (7-8mm Auto) non-insulated; Bolt cutter: 4-40/6-32/8-32/10-32/10-24. 8-1/2" OAL. **(USA)**
Trapezoidal Crimping Stations
No. 758PL0052 .....**$17.76**

Coax Cable Tool

Cut, strip and crimp RG6 and RG59 coax cable with just one tool. Long, curved cutting blade cuts cleanly and easily with 25% less effort. Precision-ground stripping stations for inner insulation and outer jacket of cable. Precision-formed crimping dies ensure accurate connections. 8-1/2" OAL. **(USA)**

No. 758PL0070 .....**$26.70**

ERGONOMIC DESIGN

Insulated Wire Stripper & Cutter

Scissor-type cutter blade; cushion handles; spring automatically spreads handles; plier nose for pulling and looping wire; 7" OAL.

8/10/12/14/16 AWG
No. 758PL503 .....**$16.50**

10/12/14/16/18/20 AWG
No. 758PL505 .....**$16.50**

16/18/20/22/24/26 AWG
No. 758PL506 .....**$16.50**

22/24/26/28/30 AWG
No. 758PL507 .....**$16.50**

ERGONOMIC DESIGN

Strippers & Crimpers - 4 pc

The most preferred wire cutter/strippers now available in a kit. All have ergonomic grips and return springs. **Includes:** Crimper 8-3/4" OAL: cuts/strips 10-22 AWG, cuts bolts 4-40, 6-32, 8-32, 10-32, 10-24; Cut/Stripper 8-1/4" OAL: 10-22 AWG, cuts bolts 4-40, 5-40, 6-32, 8-32, 10-32, 10-24; Cut/Stripper 6" OAL: 03-22 AWG; Cut/Stripper 6" OAL: 10-20 AWG; Roll pouch.

No. 758TT1010 .....**$81.99**

ATT: Government buyers
You can download our
6 GSA CONTRACTS
at www.techni-tool.com
GSA Advantage!®
www.gsaAdvantage.gov

IDEAL T®-Strippers

ENGINEERED TO STRIP EVERY WIRE RIGHT!

The industry standard for almost fifty years!

T®-Stripper Wire Strippers

Lightweight and easy to use strippers feature precision form-ground, knife-type blades that give an accurate and easy strip every time. All models have a built-in wire cutter, looping holes, a convenient plier nose and cushioned plastic grips. **(USA)**

	TT No.	Type	Solid Wire Range (AWG)	Stranded Wire Range (AWG)	PRICE
A	462ST042	T®-5	10-18	12-20	$12.85
B	462ST044	T®-6	14-24	16-26	$12.85
C	462ST050	T®-7	22-30	24-32	$12.85
D	462ST048	T®-8	6-14	8-16	$12.85
E	462ST046	T®-Cutter Wire Cutters Cut wire cleanly up to 1/2" O.D			$12.85

Designed for total-comfort, total-control wire stripping

Reflex™ Premium T®-Stripper

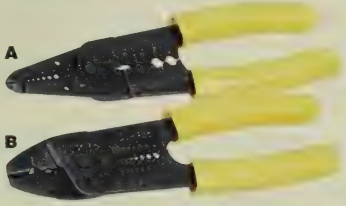
Reduce repetitive motion fatigue. The Reflex™ Premium T®-Stripper is designed to curve at 45-degrees to fit your hand's natural grip, reducing wrist stress while stripping. **Features:** no-slip grips, and convenient looping holes. **(USA)**

	TT No.	Solid Wire Range (AWG)	Stranded Wire Range (AWG)	PRICE
A	462PL415	10-18	12-20	$14.85
B	462PL416	14-24	16-26	$14.85
C	462PL417	22-30	24-32	$14.85
D	462PL418	6-14	8-16	$14.85
E	462PL341	Metric: 5mm² - 4.0mm²		$19.29

Super T®-Strippers - Static Dissipative

Specifically designed for use with electronics. Ergonomic-ESD comfort grips. Designed to reduce hand fatigue; locking pawl keeps the tool in a closed position for easy storage; spring will not come off. **(USA)**

	TT No.	Type	Solid Wire Range (AWG)	Stranded Wire Range (AWG)	PRICE
A	462ST316	T®-6	14-24	16-26	$16.13
B	462ST317	T®-7	22-30	24-32	$16.13



A. 7-in-1 Stripper

Made of hardened steel, cuts and strips up to 8 AWG stranded wire; crimps 10-22 AWG terminals; cuts unhardened bolts and screws #4 to #10 with a conduit-tapered nose to ream and deburr. **(USA)**

No. 462ST777 .....**$32.35**

B. Multi-Stripping/ Crimping Tool

Nick-free stripping of 8 to 20 AWG solid and 10-22 AWG stranded wire. Bolt Cutting Convenience: Handles 4-40, 6-32, 8-32, 10-24 and 10-32; cuts 10-22 AWG solid wire. 8" OAL. **(USA)**

No. 462ST010 .....**$33.87**

KLEIN TOOLS

A. Wire Stripper
Compact and lightweight. Hole for looping or bending wire. Yellow plastic handles. Strong spring. 12-26 AWG. 5" OAL.
No. 490ST014 .....**$8.70**

B. All-Purpose Electrician's Tool
Crimps 7-8mm ignition terminals. Strips 8 to 18 AWG solid wire or 10 to 22 AWG stranded wire (6.0 to 0.75mm²). Cuts bolts 6-32, 8-32, 10-32, 10-24 and 4-40. Two wire cutting holes, left- and right-hand wire looping holes and comfortable plastic-covered handles. 8-3/4" (222mm) OAL.
No. 490PL1001.....**$23.80**

ok Adjustable Precision Wire Strippers
Lightweight single-action cuts and strips wire insulation. Adjustment dial allows you to select one of six wire gauge settings and up to 2" strip length. Dims. 3.9" x 1.6" x 0.6".

ESD-safe polycarbonate. For 20-30 AWG
No. 479PL501 .....**$40.38**

ABS. For 26-36 AWG
No. 479PL450 .....**$40.38**

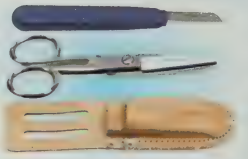
ABS. For 20-30 AWG
No. 479PL500 .....**$33.58**

ABS. for 18-28 AWG
No. 479PL550 .....**$33.58**

C.K. Precision Wire Stripper and Cutter
Adjustable precision wire stripper with built in cutter. Hardened stripping and cutting blades for 20, 22, 24, 26, 28, 30 AWG. (Germany)
C. No. 217SC759.....**$37.68**

TECHNI-TOOL

Cable Splicer Kit
Knife, Scissor & Sheath
No. 758TT040.....**$22.75**
No. 758ST055 Knife.....**$6.92**
No. 758IE5102 Scissor **$6.50**



Multi-Function Heavy-Duty Stripper
Strips insulated and non-insulated terminals 22-10 AWG and auto ignition terminals. Built-in cutter and adjustable stop. Micro adjustment. Strips AWG 24-10.
No. 711PL003 .....**$21.20**

Paladin Tools

Stripax® Pro6 Precision Wire Stripper
Performs powerful stripping of standard and industrial insulation's including PVC, THHN, silicone and polyethylene for a wire range of 10-28 AWG. The ergonomically designed, contoured handles are designed to reduce operator fatigue. Provides nick-free stripping of insulation with no damage to conductors. The built-in cutter provides a smooth, straight cut without distorting the conductor. The stripping blades are composed of 68 individual spring-compression blades to adjust precisely to the insulation. ***Lifetime Warranty.*** (Taiwan)
No. 618PR266.....**$89.99**

Mini-Stripax® plus
Compact, self-adjusting wire stripper is designed for smaller wire. It will strip solid or stranded wires from 18-28 AWG PVC. A built-in cutter eliminates the need for a second tool. Made to fit the hand and operate with low force for less fatigue. Half the size, twice as versatile as competitive tools.
No. 618ST064 .....**$96.99**

Mini-Stripax® plus Replacement Blades
PVC 18-28 AWG
No. 618PL2108 .....**$29.99**

Teflon 22-24 AWG (Green)
No. 618PL2142 .....**$55.99**

Paladin Tools

GripP Strippers
Strip 30-10 AWG wire and cable. Ergonomically designed head and handles perfectly angled to prevent wrist bends. Also cuts flat cable.
Features: Rubber embedded, non-slip handles; Precision ground wire stripping areas; Non-scoring strips and smooth wire cutting; Screw cutter and wire loops embedded in frame; Gripping jaw on front of tool.

20-10 AWG/.34-6mm²
No. 618PL1117.....**$14.99**

30-20 AWG/.0505mm²
No. 618PL1118.....**$14.99**

Surestrip™ 4.0
Strips 12-20 AWG (0.52 - 3.3mm²) solid and stranded conductors with all grades of PVC insulation; multiple conductors; double insulated cable in two working cycles without adjustments. Jaws open automatically after stripping. **Features:** wear-free gripping jaws; self adjusting stripping blades; built-in cutter.

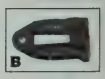
Surestrip™ 4.0
No. 618PL893 .....**$72.99**

Replacement Stripping Blades
No. 618ST078 .....**$32.99**

Self-Adjusting Combination Wire Stripper
Xcelite

Widest stripping range of any stripper — from ***34 to 8 AWG*** without adjusting. Ergonomic design with sculpted shape and soft main grip handle for more comfortable repetitive use. Fine adjustment allows you to strip thin insulation without causing damage to conductors.
Specs: Cutting Range for Solid Conductors: 16 AWG; Cutting Range for Stranded Conductors: 8 AWG. (Sweden)
No. 272PL3210 .....**$71.89**

Replacement Blade for PVC and soft materials; 34 to 8 AWG
A. No. 272PL321.....**$21.90**



Replacement Blade for PTFE and hard materials; 28 to 12 AWG
B. No. 272PL0321.....**$30.66**

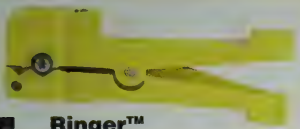
IDEAL Adjustable Coaxial Cable Stripper

For precise, fast, economical stripping. Handles tightly-wrapped stranded cables. CATV cable, SO, SJ, SJT and more. Adjustable blades to assure nick-free strips.

To 1/8" O.D. **No. 462ST066....$22.70**
1/4" to 9/16" O.D. **No. 462ST070....$45.36**
1/8" to 7/32" O.D. **No. 462ST068....$27.36**
3/16" to 5/16" O.D. **No. 462ST072....$26.29**

Replacement Blade Set-
(3 straight blades & 1 round blade) for 462ST066, 462ST068, 462ST072.
No. 462ST302 .....$6.71

Replacement Blade Set-
(3 straight blades & 1 round blade) for 462ST070.
No. 462ST304 .....$7.90



IDEAL Ringer™ Shielded Cable Stripper

For precision stripping of most non-round shielded cable and other outer jackets, including extruded Teflon®, Kapton® PVC and Kynar® insulations. 8-10 Mil insulation thickness including Kynar®. Blade included.
No. 462ST402 .....$61.60

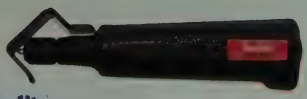
IDEAL Swivel-Blade Cable Stripper

Makes center or end strips on most types of common cable, quickly and easily. Blades adjust for insulation thickness up to 5/32". Strips PVC, rubber, neoprene, etc. **(USA)**
No. 462ST054 1/4" to 3/4" O.D. **$31.83**
No. 462ST056 3/4" to 1-1/2" O.D.....**$40.03**
Replacement Slitting Blade
No. 462ST286.....$10.67

Xcelite Corex Coax Wire Strippers

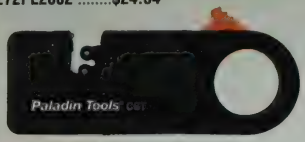
Two Blade -
Strips all single and double-shielded coax wire in one clean action, 0.10" to 0.30", including RG-178 up to RG-6. Interchangeable cassette blades.

2 Blade Coax Tool for RG-58, RG-59, RG-6, w/0.47" blade spacing; Cassette Color: Yellow.
No. 272PL2021.....$49.10
2 Blade Coax Tool for RG-58, RG-59, RG-6, w/0.27" blade spacing; Cassette Color: Blue.
No. 272PL2020.....$49.10



Xcelite Round Cable Stripper

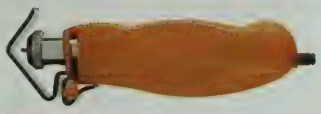
Adjusts to circular, lengthways or spiral cutting positions. Large and small cable guides provide cable capacity of 0.18"-1.57" (4.5-10mm). Maximum stripping depth: 0.18". Replacement blade stored in tool body. Tested to over 100,000 cycles.
No. 272PL002 .....$57.86
Replacement Blade
No. 272PL2002 .....$24.54



Paladin Tools CST Coax Stripper

Cam-wheel, cutting depth adjusted without special tooling. Memory cartridge eliminates readjusting blade depth when stripping different cable sizes. Three level strips on RG174 through 8281 cable as per MS39012 specs. Accepts cable from 0.100" to 0.315" OD.

Three-Step 0.279" - 0.201"
No. 618ST1240.....$99.99
No. 618ST2240 Repl. Cassette.....**$39.99**



Paladin Tools Round Cable Slitter

Slits and strips round cables with a diameter of 0.18" to 1.40". Removes insulation without nicking conductor. For power and telecommunication cables 500-1200 MCM. Not suitable for XLP insulation. Precision strip and slit rubber, PVC, nylon and most insulation materials with its adjustable depth of cut feature perfect for circumferential, longitudinal and spiral cuts. ***One-Year Warranty.*** **(USA)**
Cable Slitter for 0.18" to 1.40" O.D.
No. 618PL1822 (1822) **$27.99**
Replacement blade
No. 618PL2109 (2109) **$15.99**

Paladin Tools Data SureStrip™

Multi-purpose cutter and stripper for data, telephone and network installations. Works with CAT 3, 5, 5e, and 6 shielded and non-shielded cable. Model 1116 cuts and strips 4-, 6- and 8-conductor flat satin and UTP-STP cables, 25-pair and telephone cable, multi-conductor round cable bundles with a maximum diameter of .5", and 14-8 AWG wire. Model 1119 cuts USP/STP and coaxial cable. Strips CAT 6, 5e, 5, and RG6, RG6 Quad and RG59 coaxial cables for 2-level cable TV "F" connectors.
No. 618IE1116 Model 1116 .....**$19.99**
No. 618IE1119 Model 1119 .....**$29.99**

CPT Cable Stripping Tool

Strip the jacket and cut back the braid and dielectric from RG-6, RG-59, RG-7 and RG-11 cables in one smooth operation. Easy-to-use with either hand. Patented clean-out feature removes debris during use. Color-coded bodies and replaceable cartridges for easy identification. ***Lifetime Warranty.***

Cable Tool For RG-7 and RG-11 cables
No. 765IE1100.....$33.75
Cartridge For RG-7 and RG-11 cables
No. 765IE0110.....$63.00/10 Pk.
Cable Tool For RG-6 and RG-59 cables
No. 765IE000.....$25.75
Cartridge For RG-6 and RG-59 cables
No. 765IE6590.....$51.50/10 Pk

SARGENT QUALITY TOOLS

Stubby™ Cable Stripper

Allows you to strip cable in tight places where other tools won't fit. Replaceable cartridges adapt to several cable types. Rotates in a screwdriver motion, won't nick braid or score center conductor.
No. 694PL8500.....$21.00

Replaceable Cartridges

RG6/RG59 Coax **No. 694IE8701 ....$5.50**
RG11/7 Coax **No. 694PL0010....$5.50**
Twisted Pair (UTP) **No. 694PL0030....$5.50**
Mini-Coax **No. 694PL0070....$5.50**
RG6/59 (EZF Connectors) **No. 694PL0080....$5.50**

SARGENT QUALITY TOOLS

Multi-Tasker

No more changing strip cartridges for dual cable applications. Features a nest for RG6/59 and RG11/7 drop connectors to help insert cable and control depth of conductor foam core. Convenient storage compartment holds additional strip cartridge.

TT No	Description	PRICE
694PL8120	Strips RG6/59 & RG11/7	$24.00
694PL8140	Strips RG6/59 & UTP	$24.00
694PL8145	Strips RG6/59, RG11/7 & UTP	$30.00

How to Order a Crimp Tool

1. Select the frame of your choice. 2. Select the die. (All dies are interchangeable)

IDEAL Crimpmaster™

For plant maintenance, field service, LAN installers and small production runs. A full-cycle, compound leverage, triple ratchet tool. The frames are made of high-grade, stamped hardened steel. The crimp dies are dual-nest, precision die-cast and hardened. Ergonomic handles are designed for comfort. Crimp tool frame only.
No. 462ST506.....**$57.47**

Replacement Dies – Only

For 22-10 AWG fully insulated slide on connectors.
No. 462ST594.....**$35.11**

RG-58, RG-174 cable 50 & 75Ω.
No. 462ST587.....**$35.11**

RG-174 Mini-59 Hex BNC/TNC coax connector.
No. 462ST576.....**$35.11**

22-10 AWG insulated ring tongue terminals.
No. 462ST579.....**$35.11**

RG-58, RG-59/62 AU BNC/TNC 3-piece hex type connectors.
No. 462PA581.....**$35.11**

Crimpmaster™ Frame & Die Sets

Frame with 22-10 Awg die for insulated ring tongue terminals.
No. 462ST500.....**$82.97**

Frame with RG-58, RG-59/62 AU BNC/TNC 3 piece hex type connector die.
No. 462ST502.....**$82.97**

Frame with CATV RG-59 & RG-6 captive ring "F" connector die.
No. 462ST503.....**$76.82**

Ideal Coax and Cable Termination Kits

IDEAL

CATV "F" Connector Kit

Includes: Crimpmaster™ crimping tool for CATV; 20 F-connectors for crimp-on RG-59 plug; 20 F-connectors for crimp-on RG-6 plug.
No. 462IE400.....**$100.33**

Twisted Pair/Coax Termination Kit

Includes: Crimpmaster™ RG-58/RG-59BNC tool, Crimpmaster™ RJ-45 tool, RJ-11 die set, RJ-45 AMP die set, N-Series die, round cable cutter, line cord stripper, UTP stripper, two coax strippers, a center conductor cutter and a replacement cassette.
No. 462PR807 .....**$500.30**

Best Seller

Deluxe Crimpmaster™ Coax Crimp Kit

Includes: one each: Crimpmaster™ crimp tool frame; coax stripper with black cassette; replacement brown cassette; RG-58 and RG-59/62 BNC die set; RG-59, RG-6/RG-8281 BNC die set; RG-58/RG-174 die set; RG-8/11 Ethernet Die Set; RG-58/RG-59 Plenum die set; thin wire die set; and a case.
No. 462PL3201 .....**$305.81**

Master Twisted Pair/Coax Termination Kit

Includes: a punch-down tool with 66 blade, 110 blade, Crimpmaster™ frame; Die Sets: RJ-11, RJ-11 DEC, RJ-45, RJ-45 AMP, N-Series die, RG-58, RG-59 and RG-62 BNC; round thin wire die set; round cable cutter, line cord stripper, two coax strippers and a replacement cassette.
No. 462TE806 .....**$659.49**

Paladin Tools® Crimp Tools

CrimpALL™ Ergonomic Crimp Tool

Features soft-rubber ergonomic handles, an angled head that prevents awkward wrist bending when crimping; and less distance between handles for a more comfortable grip. Produces higher crimp force with less exertion, and no breakover force is needed to complete the crimp. EZI-Change® thumb screws let you change die sets quickly. ***Ten-Year Warranty.*** (Tawain)
A. No. 618PL8000 CrimpALL™ Frame Only **$58.99**

1300 Series Crimp Tool

Versatile crimping system with interchangeable die sets. **Includes:** quick change E71-CHANGE die screws with fully-ratcheting action.
B. No. 618PR302 Frame Only **$42.99**

Die Sets For 1300 Series & Crimpall™ Crimp Tools

RJ45 – 8P8C (8 pin) Die Set. Crimp style: flat/round, solid/stranded/22-24 AWG, RJ45 unkeyed WE and SS.
No. 618PL045 (2061) **$25.99**

Insulated terminals and lugs, solid/stranded/22-10 AWG, 12-10 (yellow)/16-14 (blue)/22-18 (red); for large professional terminals.
No. 618PL2035 (2035) **$25.99**

Open-barrel non-insulated terminals and lugs, narrow stranded 22-14 AWG/F-type (B-type), 22-18/16-14/12-10; for standard commercial terminals.
No. 618PL2033 (2033) **$25.99**

BNC/TNC, 3-piece. Cable types: RG58, RG59, RG62AU. Crimp Sizes: 0.256", 0.213", 0.068", HEX.
No. 618PL2034 (2034) **$25.99**

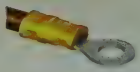
Xcelite

50% better mechanical gain than other crimpers!

ErgoCrimp Plus®

So little force needed you can crimp with only one hand. Made of high-quality Swedish steel and tested for 50,000 cycles. Ratchet device ensures that exact crimp is made every time. 10" OAL. Sold with die.

Frame & Insulated Terminals Die –
Insulated terminals and splices, solid/stranded wire; Wire Size: 22-10 AWG
No. 272PL1000 .....**$139.78**



Sargent Quality Tools

Best Seller

Open Barrel Crimper

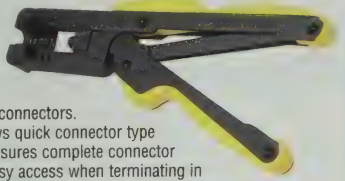
Crimps a wide range of commercial open-barrel contacts. Crimps are "F" type 14-24 AWG and are produced in three cavities: C 14-16 AWG; D 18-20 AWG and E 22-24 AWG. Insulation crimps are "F" type and are produced in two cavities: A 14-18 AWG and B 20-24 AWG. 8" OAL. Cushion grips. **(USA)**
No. 694ST128 .....**$25.00**

3 Cavity Full Cycle Insulated

Crimp insulated terminals and splice wire sizes 22-18 AWG. in front cavity; 16-14 AWG. in middle cavity; 12-10 AWG. in rear cavity. 9" OAL. **(USA)**
No. 694ST010 .....**$62.50**

D-Subminiature Contact Crimping Tool

Crimps 30-20 AWG contacts.
Ratchet-release lever contact locators hold pin for easy wire insertion, assures proper termination. 9" OAL. **(USA)**
No. 694PL3127 .....**$115.00**



Uni-Seal Combo Drop Tool

Universal tool for RG6/59 and RG11/7 male drop compression PPC, EX Series connectors.
Features: Movable yoke allows quick connector type change over; Toggle action assures complete connector seal; Handle design allows easy access when terminating in a M.D.U. enclosure or with a short stub-in; Less compression force required; Metal parts for long life; Spring action opens actuation chamber for easy connector insertion; Rated for 25,000 cycles on high load connectors and easily field refurbished.
No. 694PL9010 .....**$75.00**

New!

Dual Chamber Mod Plug Crimper

For cutting and striping twisted pair cable and crimping two different size modular plugs. Lightweight design accepts interchangeable dies.
Features: Compound action reduces hand pressure; Replaceable blades for no-nick cable preparation; Crimps conductor and primary strain relief on AMP or WE/SS configurations. Color-coded dies make easy change-over. For RJ11/RJ12 Blue 6-position and RJ45 Yellow 8-position modular plugs. **(USA)**
No. 694PL7668 (7668 CT) **$55.00**

IDEAL OmniSeal™ Pro XL Compression Tool

Smaller, more compact tool handles wider range of connectors. No calibration or accessories required to terminate Ideal brand compression connectors. Terminate most other manufacturers connectors with easy plunger depth adjustment.
Features: Factory pre-set to work with all Ideal compression connectors; Compresses F-type, RCA, BNC & Mini connectors; Fits other manufacturers connectors without adapters; Convenient handle lock makes tool easy to slip into pouch; Handy 7/16" hex socket for easy connector to cable installation; User-friendly spring-loaded handle; Textured slip-resistant comfort grip; High strength aluminum body for durability & long life. ***Lifetime Guarantee.***
No. 462IE793.....**$86.21**

Universal Compression Tool

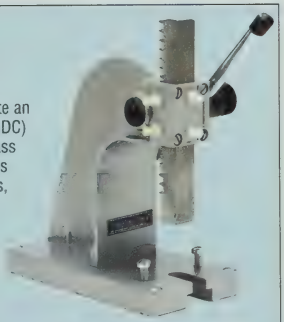
Compatible with most brands of RG6, RG59, RG7, and RJ11 compression connectors. Comfortable grips, black oxide finish. Hardened steel construction.
No. 711IE265.....**$80.00**

New!

PanaVise®

IDC Bench Assembly Press Kit

Retrofit kit for the PanaPress to create an Insulation Displacement Connector (IDC) Assembly Press. For low volume, mass termination of various IDC connectors on ribbon cable. **Includes:** PanaPress, IDC base, ram adapter, cable guide, mounting screws and allen wrench. Smoothly and securely terminates up to 64-pin conductor cable. More effective than hand crimpers – eliminates the "scissors effect" to helps prevent injuries.



502 PanaPress, 506 IDC kit (Shown)
No. 758IE5026.....**$235.96**

502 PanaPress, 561 Crimp Press kit
No. 758IE5261.....**$155.00**

502 PanaPress only
No. 620PO096.....**$168.94**

Telecom Crimp Tools

IDEAL Telemaster Economy Telecom Crimp Tools

Professional, economy Telecom Crimp Tool for any modular plug application. Each tool has a built-in cut and strip blade.

No. 462PL0496 (RJ45/RJ11) **$57.22**
No. 462PL499 (RJ11/RJ22).....**$59.89**

RJ-45/11 Combo TelCom Kit

Includes: RJ-45/11 combination TelCom Crimp Tool for keyed and non-keyed RJ-45 plugs with built-in cut and strip blades; 15 each four- and six-position RJ-11 mod. plugs, and eight-position RJ-45 mod. plugs; case.
No. 462PL3704 .....**$85.18**

Ideal Precision Crimp Tool

Designed to crimp solid barrel contacts, D-subminiature contacts for 20-26 AWG RS232 Interface connectors. 4-way indent dies per MS22520, full-cycle ratchet, built-in pin & socket locator, comfort grip handles. Small compact tool made of high grade steel. 7" OAL. **(USA)**
No. 462PL5465.....**$117.60**

Tyco Electronics TYCO Pro-Crimper II®

Versatile, The Pro-Crimper II® has interchangeable dies to achieve the correct crimp connection the first time–every time. Pick the Frame, add the Frame Dies you need, select a pre-configured Frame and Die set or pick the Kit. (Taiwan)
No. 104PR494 Frame only.....**$74.80**

PIDG® and Plasti-Grip® Terminal Kit

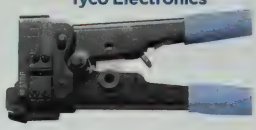
Includes: Hand Tool, 225 Ring and Spade terminals in 12-10, 16-14 and 22-16 AWG wire sizes; and case. (Taiwan)
No. 104LA823 .....**$152.85**

Die Sets

TT No.	Amp No.	Use	PRICE
104PL361	58436-1	RG58, 62, 59 - 50Ω BNC	$47.60
104PL425	58425-2	RG179/161/187 - 75Ω BNC	$47.60
104ST423	58423-1	Insulated Terminal D.S.	$49.30
104PR545	58545-1	Uninsulated Terminal D.S.	$107.10
104PR448	58448-3	Size 20-D-Sub Min D.S.	$125.80

Tyco Electronics

TYCO Modular Plug Stripper/Crimper



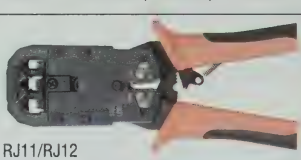
Cuts, strips and terminates modular connectors. Color-coded die sets. Ratchet action. 7-1/4" OAL. **(USA)**
No. 104ST652 Frame only **$97.35**

Hand Tool & Die
No. 104TE6523 8-Position (2-231652-1).....**$133.10**
No. 104TE6525 4 & 6-Position (2-231652-4)....**$133.10**

Die Set Only
No. 104TE6511 8-Position (853400-1) **$43.35**
No. 104TE4008 4 & 6-Position (853400-8) **$43.35**

Paladin Tools

All-In-One Pro Telephone Tool



This versatile tool combines all the necessary tools to cut, strip and crimp modular telephone wires and plugs. Will cut and strip flat line cord cable up to 8 conductors wide. Crimps 4-position RJ22 handset connectors. Crimps 4- and 6-position RJ11/RJ12 connectors, 8- position RJ45 (non-keyed), 28-22 AWG (.08-.34mm²) telephone and data cables.
No. 618TE530 .....**$129.99**

All-In-One Data & Phone Tool

New!

Cut, strip and crimp without changing tools or die sets. Comfortable rubber-embedded handles. Crimps Western Electric (WE) and Stewart Stamping (SS) RJ45, RJ11/RJ12 and RJ22 modular plugs. Cuts and strips round UTP/STP phone and data cable along with flat satin phone cable (28-22 AWG). ***5-Year Warranty.***
No. 618IE1556 .....**$46.99**

Hex Crimp Tool

Steel frame hex crimper for use on connectors, drop cables. Fits .360" hex size. **Features:** Rugged steel frame; Easy in-field calibration and adjustment; Toggle action ensures a proper crimp; Field maintenance kit includes new pins, washers, linkage, brass adjustment nut, and cogged adjustment wheel. ***Lifetime Warranty.***
No. 765IE003 .....**$32.50**

Pocket Sized TerminX® Compression Tool

Attaches connectors used in drop cable applications. Fits Channel Vision Push & Seal® RG-6, RG-11, RG-7 and RG-59 compression connectors. One-handed operation. Factory calibrated for accuracy. Spring-loaded support for proper termination.

Fits Channel Vision Push & Seal RG-6 and RG-59
No. 765IE5659 .....**$60.77**
Fits Channel Vision Push & Seal RG-7 and RG-11
No. 765IE5711 .....**$74.16**

Wire Caddies

B.E.S. *Handles extra-large wire or cable spools*

Heavy Duty Wheeled Cable Caddy

Cable caddy transports many spools of cable or wire with ease. Heavy loads are supported by 1/2" thick steel rods that hold spools up to 16" wide. Wire can be spooled with caddy upright or prone. Supports 220 lbs. **(USA)**
No. 416IE1200 .....**$225.00**

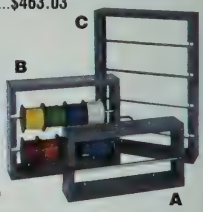
GREENLEE

Deluxe A-Frame Mobile Caddy

Holds up to 24 spools of #12 AWG wire or 16 spools of #10 AWG spools. Folds down for easy storage. Pinless design and 10" diameter pneumatic tires for jobsite portability. Includes 8 solid steel 1/2" spindles. **Specs:** 28-1/4" wide; 47-7/8" high; Maximum total spool weight: 400 lbs.
No. 414IE9510 .....**$463.03**

DURHAM

Wire Spool Racks

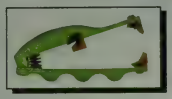


Heavy-duty spool racks hold 1, 2 or 4 spools of wire for convenient storing and dispensing. **(USA)**

A. 1-Rod Rack 26-1/8"W x 6"D x 14"H; 9 lbs
No. 307IE383 .....**$79.00**
B. 2-Rod Rack 26-1/8"W x 6"D x 21-1/2"H; 11 lbs
No. 307IE384 .....**$95.00**
C. 4-Rod Rack 26-1/8"W x 6"D x 36-1/2"H; 25 lbs
No. 307IE368 .....**$141.30**

Gator® Center Conductor Beveller and Cleaner

An essential tool for preparing hard line cables after coring. Removes burrs that can damage connectors. Cleans bonded dielectric without scoring the center conductor. Reversible teeth never need sharpening. Fits comfortably in either hand.

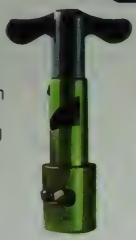


No. 765IE001 .....**$23.69**

Replacement Blade
No. 765IE002 .....**$6.70**

Stripping/Coring Tools

Strips back and bevels the outer conductor, cores the dielectric and strips the back outer jacket in one smooth operation. Features non-clogging stops. Cores out-of-round cable. Prevents o-ring damage. Operate manually or with a drill.



765IE320

765IE0500

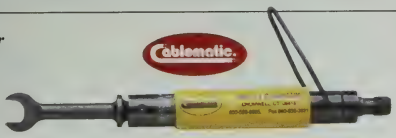
For 320 (7mm) QR with Corning Gilbert GAF-360-320-QR Crimp Style, Thomas & Betts SN320QR, or PPC EX320QR Connectors
No. 765IE320 .....**$123.60**

For 500 QR
No. 765IE501 .....**$123.60**
For 540 QR
No. 765IE540 .....**$123.60**
For 860 QR
No. 765IE860 .....**$129.78**
For 1125 QR
No. 765IE1125 .....**$152.44**
For T10 and PIII .500 cable
No. 765IE0500 .....**$88.48**
For T10 and PIII .625 cable
No. 765IE625 .....**$88.48**
For T10 and PIII .750 cable
No. 765IE0750 .....**$88.48**
For T10 and PIII .875 cable
No. 765IE0875 .....**$96.82**
For T10 and PIII 1.000 cable
No. 765IE1000 .....**$99.86**
For Trilogy MC2 1.000 cable
No. 765IE0100 .....**$96.31**

On-body connector insertion tool!

Cablematic

Angle Head Torque Wrench



Prevent damage to your equipment from over-or under-tightening. Connector insertion tool located on the body for fast, easy "F" connector insertions. Audible clicking sound to indicate proper calibrated torque. **(USA)**

- Torque in inch-pounds: 20
- 7/16" wrench
- Length: 6-1/2"
- Torque in Newton-Meters: 2.26
- High visibility yellow cushion grip body
- Removable belt loop

No. 680SC207 .....**$31.27**

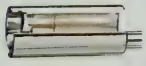
RIPLEY COMPANY

Multi-Socket Can Wrench

Eliminates the need for 5 separate nutdrivers. Reversible double sockets on each end. Sockets stored in impact resistant polymer handle. Sockets: 7/16", 3/8", 5/16" 1/2", 1/4" and 5/32" security hex.
No. 680IE8521 .....**$34.72**

IDEAL

Deep Chassis BNC Connector/ Removal Tool



For easy access to high-density locations of connectors.

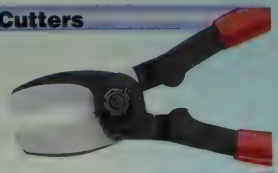
4" blade; 8" OAL
No. 462IE044.....**$30.23**

8" Blade; 12" OAL
No. 462IE042.....**$33.69**

12" Blade; 16" OAL
No. 462IE043.....**$33.69**

Cable Cutters

TECHNI-TOOL



Cable Cutter

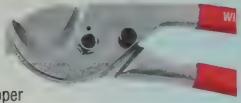
Cut copper wire easily without frayed ends. Capacity of 3/0 cable. 7-1/2" OAL. **(USA)**
No. 758PL092 .....**$25.62**

TEC-CUT

Cable Cutter

Shear type jaw cuts up to 4/0 aluminum and 2/0 soft cooper. 1/2" jaw opening capacity provides high leverage for increased cutting power. Features a high polish finish and electronically induction hardened cutting edge of 60 to 62 HRc. 9-1/2" OAL. **(USA)**
No. 758PL216 .....**$19.75**

Wiha



High Leverage Cable Cutters

Sickle-shaped cutting edge prevents cable movement when cutting. For multi-strand copper or aluminum cables. Special CV steel forging. Soft vinyl grips. (Germany)

6.75" OAL
No. 881PL641 .....**$41.38**

9" OAL
No. 881PL643 .....**$67.44**

KLEIN TOOLS

High-Leverage Cable Cutter and Clipper

Cable-gripping, shear-type jaws cut up to: 4/0 aluminum to 2/0 soft copper; 100 pair, 24 AWG communication cable. *Not designed for cutting steel or ACSR.* 9-1/2" OAL.
No. 490PL018 .....**$28.75**

GREENLEE

Compact Ratchet Cable Cutter

Convenient for working in tight places. The single speed ratchet mechanism lets you operate this compact cable cutter with one hand, leaving your other hand free. Stores easily in tool pouches. The blade release allows blades to be opened in mid cut. **Specs:** Copper Capacity: Maximum: 500 MCM (240mm²), Frequent Use: 400 MCM (185mm²); Aluminum Capacity: Maximum: 750 MCM (400 mm²), Frequent Use: 600 MCM (300mm²): Capacity Maximum: Communications Cable: 1-1/8" dia.; 10-1/2" (262mm) OAL. **(USA)**
No. 414PL759 .....**$232.86**

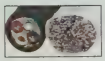
GREENLEE

This heavy-duty heat treated cable cutter cuts up to 2/0 copper and aluminum. 9-1/4" OAL. **(USA)**
No. 414SA060 .....**$32.30**

Banana Cable Cutter

For cutting CATV coaxial cable up to 0.75". Heat-treated high carbon steel shearing edges. 3/8" case-hardened steel pivot bolt with jam nut to prevent slippage. 8-1/4" OAL. **(USA)**
No. 188TE014 .....**$27.20**

The Shark™



The best cutter for cutting multi-stranded aluminum and copper cable. It easily cuts 200 pair clean, and eliminates frayed ends. Not for steel cable. **(USA)**
No. 188PL240 .....**$31.80**

Paladin Tools

GripPack™ SurePunch™ Punchdown Tool Kits

All the tools you need in one compact holder. Belt clip swivels to move kit out of your way while you work without tools falling out. Includes: Data SureStrip UTP/STP cutter/stripper, datacomm scissors, SurePunch Pro termination tool with reversible 110/66 blade, black Sharpie pen, holster and belt clip.

Pro Technicians Kit with Mini Maglite Flashlight
A. No. 618IE4941 ..... $142.99

Pro Installers Kit
B. No. 618IE4942 .....$126.99

SurePunch Termination Tools

C. SurePunch. Terminates and cuts wire and cable into 66, 110, BIX™ and Krone® LSA panels. Soft rubber handles, meets demands of all Category cables through Cat6.

Handle with 110/66 combination cut-only blade
No. 618PR263 .....$61.99

D. SurePunch Pro. LED light shines right on work area. Advanced spring mechanism requires less force to use. Accepts all brands of twist-and-lock style blades. Retractable spudger, hook and pick.

Handle with reversible cut & punch or punch only 110/66 blade
No. 618IE3596.....$77.99

Crimping Pliers & Connectors

FLUKE networks

Need-L-Lock™ Crimping Pliers

Two-in-one design crimping pliers combine a UR/UY/UG connector crimper with needle nose pliers. Aligned crimping jaws come down square ensuring a solid connection. Jaws are grooved to provide a better grip on wires and feature a built-in cutter and wire stripper. Forged from high quality steel with rubber coated ergonomic handles for reliable grip, these 6-1/2" needle nose crimping pliers are a tool every technician or contractor needs.

Features:
- UR/UY/UG connector crimper
- Needle nose pliers
- Wire stripper hole
- Built-in cutter
- Rubber-coated handles for non-slip grip

No. 300PL000 .....$17.25

TEC-CUT Connector–Crimping Pliers with Side Cutters

Designed to seat UG, UR and UY connectors. Special stop behind cutout prevents damage to connectors. Features blue ESD foam padded handles with coil spring. **(USA)**

No. 758PL234.....$20.35

3M Scotchlok™ Connectors

- Moisture-Resistant Seal
- **100/Box**

TT No.	Connector	Max. Insulation	AWG	PRICE/Box
A. 105CN043	UG	.066"	Tap wire: 19-26 through wire: 22-26	$21.95
B. 105CN044	UR	.066"	Tap wire: 19-26 through wire: 22-26	$14.65
C. 105CN045	UY	.060"	22-26	$12.80

Cable Wrap and Tapes

TECHNI-TOOL

CableWrap

Designed to eliminate the frustration, inconvenience, and mess associated with cables. Constructed with nylon tie for permanent attachment to your cable. **10/Pk (USA)**

No. 758ST6666 1" x 6" Black **$23.95**
No. 758ST9010 1" x 9" Black **$26.95**
No. 758ST6100 1" x 6" Rainbow Assortment....**$23.95**

CinchStrap-EG

The fastest way to organize any heavy, hard-to-manage cable system. Takes stress off large cable bundles. Designed with an end grommet that lets you safely suspend cables with the strength of a metal fastener from wiring racks, mobile carts, along walls, over doorways and in wiring closets. Won't crimp or damage Category 5 or fiber optic cables. **10/Pk (USA)**

No. 758ST0710 1" x 7" Black.....$34.95
No. 758ST0111 1" x 10" Black.....$36.95

RIP-TIE Lite™ Cable Wrap

These light duty cable wraps are perfect for bundling cables. These wraps will not crimp, so they won't damage delicate computer network or fiber optic cables. 1/2" x 8". **10/Pk (USA)**

No. 679ST8010 Black **$8.75**
No. 679ST8100 Assortment **$8.75**

TECHNI-STAT

Conductive Nylon Cable Ties

Other sizes available!

Conductive throughout, can be grounded. Rated 10^7 to 10^8 Ω/sq.; Locks tightly but won't stretch or slide. 6.6 nylon. Tensile strength: 40 lbs, Width: 0.14", natural color, tamperproof. **1000/Box**

No. 758ST0400 4" **$57.00/Box**
No. 758ST0600 6" **$69.00/Box**
No. 758ST0800 8" **$87.00/Box**
No. 758ST0110 10" **$66.00/Box**

TECHNI-TOOL

Gaffers Tape

High-strength, vinyl impregnated cloth tape with a matte finish. Conforms to irregular surfaces, leaves little residue. Waterproof, abrasion resistant, durable, yet easy to hand tear. **(USA)**

Colors	2" x 60 Yards	3" x 60 Yards
Black	758IE200	758IE3000
White	758IE2001	758IE3001
Gray	758IE2002	758IE3002
PRICE	$17.53	$23.47

RIP-TIE Ripwrap Self-Gripping Tape

Used to bundle fiber optic and structured cable. Provides a soft hold for use with sensitive data cables. A 2" overlap in tape provides 3 psi shear strength. **(USA)**

Continuous Roll - 1" x 30'

No. 679IE001 Black.....**$7.95**
No. 679IE002 Blue **$7.95**
No. 679IE003 Yellow.....**$7.95**
No. 679IE007 White **$7.95**

Perforated Roll: 131 pc. unit - 1/2" x 8" each piece

No. 679IE008 Black.....**$13.95**
No. 679IE009 Blue **$13.95**
No. 679IE010 Yellow.....**$13.95**
No. 679IE014 White **$13.95**

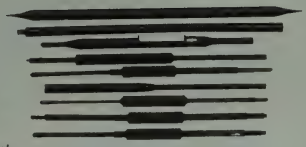
Velcro® Rolls

Usable in hundreds of different applications. Fastens and reattaches quickly and easily. Choose from three widths. 25 yards OAL. 100% Nylon. Black. **(USA)**

Width	Side	Adhesive Back	PRICE
3/4"	Hook Loop	679IE940 679IE911	$34.50
1"	Hook Loop	679IE051 679IE984	$40.00
2"	Hook Loop	679IE245 679IE195	$75.00

**Non-Adhesive Back Available*

GC/Waldom



Anti-Static Alignment Tool Kit

Nine anti-static alignment tools with a wide range of tip styles and sizes you'll have a tool for adjusting or aligning any conventional component.
Includes: Adjustment screwdriver; Combination aligner; Steel-tip duplex aligner; Small hex & screwdriver; Hex & tip Tool; Mini potentiometer & trimmer tool; Double-ended hex tool; 3-in-1 hex core tool; Square & hex tool; Pocket case.
No. 388SC5007 .....**$13.60**

Anti-Static Alignment Tool Kit

Protects against high voltage and static. **Includes:** Steel tip duplex aligner; Mini potentiometer and trimmer; Double-ended square/hex tool. (China)
No. 711IE002.....**$6.30**

All-Purpose Alignment Tool/Service Aid Kit

Selection of popular TV alignment tools and service aids, all in a durable, plastic roll-up case. Stores easily in service kit. **Includes:** K-Tran Tool, Core Aligner, Duplex Aligner, "Shorty" Aligner, Hex Wrench 5", Screwdriver 16", Screwdriver, Zenith Alignment Tool, Brush/Forked Tip Tool, TV Aligner, Hex Wrench Core Tool and Hex Alignment Tool.
No. 388PR5040.....**$31.56**

Tec Alignment Tools

6" insert/extended metal tab sides, Tenite
A. No. 654TE012 ..**$1.20**

6" Plastic Spudger
B. No. 295SO301 .....**$1.58**

5-3/4" Nylon Screwdriver
C. No. 654PR014.....**$1.00**

5" Double ended trimpot. .050" hex alloy and 3/32" wide steel screwdriver tip
D. No. 479PR607 .....**$2.55**

TECHNI-TOOL

Miniature Potentiometer Trimmer Adjustment Tool

Conductive nylon shaft adjustment tool with 1/4" diameter shaft. One end has a 0.085" wide steel tip, the other is 0.085" wide with a .040" recessed steel tip. Anti-static black, 4-15/16" OAL.
No. 758IE8608.....**$2.10**

Telco Probe

The point is used to locate a wire lead, the hook to pull the lead, the notch in the tip to form or reform the wire harness. Made of tough nylon with glass fibers, with a clip for your pocket or pouch.

For all communication wiring
No. 461IE630 .....**$1.50**

For 28 AWG. wire or smaller
No. 461IE163 .....**$1.50**

FLUKE networks

ProbePic Multi-use Probe

Pocket size insulated probe has multiple uses. The probe end can be used to check for damaged connections or to spread apart wires for direct access. Use the pic end for pulling wires. Molded of tough nylon. 105° angle.
No. 300PR022.....**$6.35**

Lamp Extractor

Firmly and gently grasps miniature lamps with bayonet-type bases. 4" OAL with 1/2" diameter handle. Lamp grasp is limited to 5/16" to prevent shorts. *WECO 553A.*
No. 594TE170.....**$12.50**

FLUKE networks

Banjo Modular Adapter

Now when the modular jack clip breaks, you don't have to toss it out...just replace the test cord and you're back in business. Allows circuit access without disrupting service; copper contacts are angled to prevent alligator clips from falling off during testing. There are also small holes in each contact for the use of test probes. Circuits are clearly marked.

Banjo 4-wire
No. 300AC210 .....**$23.75**

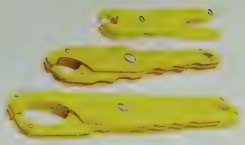
Banjo 6-wire
No. 300AC220 .....**$25.65**

Banjo 8-wire
No. 300AC230 .....**$30.25**

Standard Adapter
No. 300TE010 .....**$13.75**

IDEAL

Safe-T-Grip® Fuse Puller



No slip! Formed to fit the fingers. Assures a positive, full grip. **(USA)**

Midget Fuse Puller:
Use for 9/32" to 1/2" dia. fuses.
No. 462MI010 5" OAL **$7.83**

Pocket Fuse Puller: 0-100 Amp.
No. 462MI012 7-1/2" OAL **$13.23**

Giant Fuse Puller: 100 to 600 Amp.
No. 462MI014 12" OAL **$29.15**

Cellular Phone Maintenance Kits

Cellular Phone Maintenance Tool Kit - 10 pc

Includes: High alloy steel blades; Pressing blade; Panel pry bar; additional T-grip; Screwdrivers, slotted: Tip: 0.5mm, 2.0mm (.020 and .079"); Torx: TX5, TX6; Torx Tamperproof: TX8; Phillips: PH1; Antenna-repair-tool: Type A and Type B. (Germany)
No. 217SC243 .....**$16.30**

VESSEL

Ceramic Drivers

Feature a zirconium ceramic core that is nonconductive with no electromagnetic induction, ideal for alignment of high frequency circuits. Rotating cap handles for easy use, recommended for audio/visual equipment, Oscilloscopes, wireless equipment, etc. (Japan)

TT No.	Tip	Size/mm	Color Code	PRICE
464SC650	Slotted	9 x 30	Green	$13.98
464SC651	Slotted	1.3 x 30	White	$13.98
464SC652	Slotted	1.8 x 30	Yellow	$13.98
464SC657	Slotted	2.2 x 30	Orange	$13.99
464SC653	Slotted	2.6 x 30	Red	$12.63
464SC656	Phillips	1.7 x 30	Light Purple	$14.90

Hex is available upon inquiry.

TECHNI-FACT

Did you know?

We have at least 30 years experience with over 50 manufacturers ....

... including Weller, Pace, Fluke, O.C. White and Ideal. Which means we know more about these key products than any other supplier.

50 years

Xcelite 43 Years
Weller 43 Years
PANAVISE 43 Years
IDEAL 39 Years
Erem 38 Years
LINDSTROM 38 Years
PACE 36 Years
O.C. White Co. 33 Years
FLUKE 35 Years

Xcelite

Cable Tie Gun

Tension adjustment enables you to use miniature, intermediate, standard and heavy-duty cable ties. Makes a flush cut with each use. Die-cast steel construction provides durability and long life.

No. 272IE0300 (DCT300V).....**$34.21**

IDEAL

Heavy-Duty Cable Tie Tool

Gives proper tension to small, intermediate and standard ties. Quick cutoffs every time it ties.

No. 462ST014 .....**$235.38**

Sturdy, Compact Design, Fits in your pocket!

Wire-Marker Dispenser

Only 6"L x 3"W x 1/2"D, carry comfortably in shirt or pants pocket. Rugged, sturdy case. Flip-top cover reveals ten tape rolls at once. Dispenser tab holds tapes firmly in place.

No. 462PR301.....**$41.09**

Refill pack with one each of 0-9 legend rolls

No. 462PR399.....**$30.46**

Identification Cable Ties

Tie and identify bundles of cable in one operation. Large flat area for imprinting or writing the required information.

No. 804PR010 No. 804PR014 No. 804PR012

TT No.	Min. Tensile Unlocking Strength	Length In. (mm)	PRICE 100/Pkg.
804PR012	18 lbs.	4" (101.6)	$7.40
804PR010	18 lbs.	4-1/4" (107.9)	$7.55
804PR014	50 lbs.	8" (203.2)	$52.45

Heavy Duty Lashing Cable Ties

TT No.	Min. Tensile Unlocking Strength	Length In. (mm)	Qty/ Pk.	PRICE/ Pk.
804PR122	120 lbs.	8-7/8"(225.4)	50	$21.13
804PR123	120 lbs.	11-7/8"(301.6)	50	$6.50
804PR030	120 lbs.	15-1/4"(387.4)	100	$15.15

Cable Tie Tools

HellermannTyton.

Mark 7 Tensioning Tool

Ergonomic design and unique 1" stroke reduce operator fatigue and speed of installation. MARK 7 has three variable tension levels and quick, infinite adjustability for flush cutoff. Tough glass reinforced nylon case, chromium steel components, and roller bearing mechanism. Wt.: 9-1/2 oz.

A. No. 804PR007 .....**$164.60**

Mark 7 Blade Replacement Kit

No. 804PR070.....**$13.45**

Best Seller

Mark 7 HT (Heavy Tension)

Same design as the MARK 7 with increased tension range.

No. 804PR702 (Not Shown) **$264.95**

Mark 9 Tensioning Tool

Designed to tension and cut-off stainless steel ties. **Features:** Padded foam grip handle for comfort and control; Two variable tension levels; Easy-to-read display; Low friction-bearing mechanism to reduce hand effort and provide smooth stroke; Hook for hanging on belt or tether; Double-wall linkage adds more strength. Accommodates stainless steel ties to .53" in width.

B. No. 804IE009 .....**$340.25**

Service Kit for above includes replacement blade, screw for nose piece and instructions.

No. 804IE0900.....**$24.15**

Mark 9 HT (Heavy Tension)

The Mark 9 HT accommodates the highest range of styles and sizes and includes non-slip grip, a 5/8" stroke, adjustable standard or heavy tension.

C. No. 804PR090.....**$265.75**

HellermannTyton. Cable Tie Mounts

4-Way Screw Mount and Rubber-Based Adhesive. For applications where higher temperatures, certain chemicals or UV radiation are a concern. 100 per package, white.

TT No.	Cable Tie Series	Dimensions – inches (mm) Length	Width	Height	PRICE
804IE2510	T18	.625" (15.88)	.625" (15.88)	.130" (3.30)	$35.45
804IE0310	T18, T30	.750" (19.05)	.750" (19.05)	.150" (3.81)	$48.70
804IE0410	T18 thru T50	1.125" (28.58)	1.125" (28.58)	.190" (4.83)	$65.45
804IE0510	T18 thru T50	1.500" (38.10)	1.500" (38.10)	.250" (6.35)	$84.45

Single Screw Mount 100 per package, white

TT No.	Cable Tie Series	Mounting	Dimensions – inches (mm) Length	Width	Height	PRICE
804IE010	T18 thru T50	#6 Screw	.380" (9.65)	.600" (15.24)	.265" (6.73)	$15.90
804IE110	T18 thru T50	#8 Screw	.380" (9.65)	.600" (15.24)	.265" (6.73)	$15.90
804IE210	T18 thru T120	#8 Screw	.620" (15.75)	.875" (22.23)	.375" (9.53)	$38.40
804IE310	T18 thru T120	#10 Screw	.620" (15.75)	.875" (22.23)	.375" (9.53)	$38.40
804IE410	T18 thru T120	.250" Screw	.620" (15.75)	.875" (22.23)	.375" (9.53)	$38.40

Anchor Mounts Cable ties may be inserted from any of the four sides of the mount. May be placed parallel or perpendicular to wires. 100 per package, white

TT No.	Cable Tie Series	Mounting	Dimensions – inches (mm) Length	Width	Height	PRICE
804IE1100	T18 thru T50	#8 Screw	.400" (10.16)	.800" (20.32)	.200 (5.08)	$17.50
804IE2100	T18 thru T50	#10 Screw	.400" (10.16)	.800" (20.32)	.200 (5.08)	$17.50

Low Profile Single Screw Mount 100 per package, white

TT No.	Cable Tie Series	Mounting	Dimensions – inches (mm) Length	Width	Height	PRICE
804IE019	T18	#2 Screw	.315" (8.00)	.495" (12.57)	.135 (3.43)	$21.80
804IE029	T18 thru T50	#8 Screw	.495" (12.57)	.810" (20.57)	.135 (3.43)	$30.20

Standard Cable Ties

TT No.	Min. Tensile Unlocking Strength	Length In. (mm)	PRICE 100/Pk.
804PR040	18 lbs.	3-3/8" (85.7)	$1.10
804PR038	18 lbs.	4" (101.6)	$1.75
804PR034	18 lbs.	5-3/4" (146.1)	$1.65
804PR036	18 lbs.	8" (203.2)	$1.90

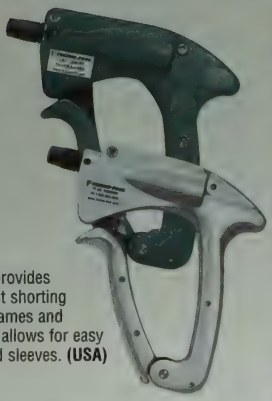
TT No.	Min. Tensile Unlocking Strength	Length In. (mm)	PRICE 100/Pk.
804PR044	30 lbs.	6" (152.4)	$1.90
804PR046	40 lbs.	8-1/2" (215.9)	$2.65
804PR048	50 lbs.	11-3/4" (298.5)	$6.25
804PR050	50 lbs.	15-1/2" (393.7)	$6.70

TECHNI-TOOL

Manual Wire Wrapping Tools

Designed with a chuck nose piece fit to the full range of power tool bits and sleeves. For 22-32 AWG wire. Provide a maximum of ten turns. **(USA)**

Lexan plastic housing
No. 758WI564.....$96.43



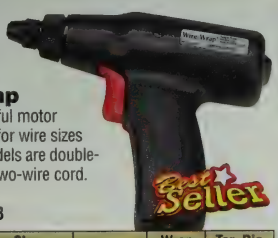
Insulated Manual Wire Wrapping Tool

Coated with an insulative material that provides 1000V dielectric strength to help prevent shorting between the pins of main distributing frames and other equipment. Collet-style nosepiece allows for easy installation of industry standard bits and sleeves. **(USA)**

Silver aluminum casing
No. 758WI558 .....$100.99

COOPER

Electric Powered 14YB3 Series Wire Wrap



Heavy-duty wire-wrap tool with a powerful motor & high-impact-resistant plastic housing for wire sizes 18-32 AWG. Speed is 4500 RPM. All models are double-insulated, insulated collet nut, and 8 ft. two-wire cord. Wt.: 1.2 oz.
No. 272WI034 Standard **$460.18**

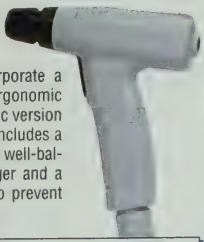
Bit TT No.	Bit PRICE	Sleeve TT No.	Sleeve PRICE	AWG	Wrap Type	Ter. Dia. Max. In.
272WI160	$49.63	272WI218	$25.28	22-24	S	0.074
–	–	272WI222	$39.89	26	S	0.039
272WI208	$66.13	272WI222	$39.89	30	M	0.036

Electric Powered Wire Wrap® XA4

Ergonomically built for two-finger operation. Comfortable, lighter trigger pressure, reduces hand and wrist fatigue. "Operator Adjustable Indexing" features six separate positions for operator preference. Slim, lightweight, durable quality. Designed for service work and medium production.
No. 272WI370 Backforce.....**$334.38**

ok

PTX Series - Ergonomic Wire Wrapping Tools



These electric and battery powered tools incorporate a number of features that are intended to address ergonomic requirements and boost your efficiency. The electric version is available in 115V or 230V. The battery version includes a long-life NiMH battery. Both feature lightweight, well-balanced construction, dual-finger short-throw trigger and a long handle to mitigate pressure on the palm, to prevent repetitive stresses. **(USA)**

Wire Wrapping Kit

Kit Includes: Battery wrap/unwrap tool, Charger; 2 NiMH batteries; Dual function wrapping/unwrapping bit/sleeve set, 22-24 AWG; Tool pouch.
No. 479IE001 .....$552.50

Electric Wrap/Unwrap Tool – 115V, .86 lb., 3700 RPM (Not Shown)
No. 606IE001 .....$249.48

Electric Wrap/Unwrap Tool with Backforce – 115V, .86 lb., 3700 RPM (Not Shown)
No. 606IE010 .....$285.00

Hand Wrapping & Unwrapping Tools

TECHNI-TOOL

Manual Wrap/Strip/Unwrap Tools

Best Seller

Wrap, unwrap and strip the appropriate diameter wire. For field service and repair.

Modified wrap, 22-24 AWG
No. 758WI1164....$33.40

Regular wrap, 30 AWG
No. 758WI1166....$24.91

Modified wrap, 30 AWG
No. 758WI1168....$22.74

Wrap/Unwrap Tools

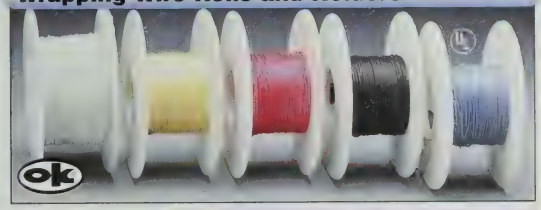
TECHNI-TOOL

TT No.	Type	Wire Size AWG	Type	Terminal Hole Dia.	Terminal Hole Depth	PRICE
758WI1054	E	20-26	Left/Right	.070	1.00	$29.12
758WI1056	D	20-26	Left	.070	2.360	$24.61
758WI1064	A	24-32	Left	.038	1.000	$17.56
758WI1086	E	24-32	Left/Right	.038	1.000	$27.55

One tool that does the job of two. Quick, convenient & easy to use. *Switching from wire-wrapping to unwrapping takes only seconds* – just change the cap from one end to the other. **(USA)**

	Wrapping Side						Unwrapping		
TT No.	Reg	Mod	Wire Size AWG	Max. Insul. Dia.	Term. Hole Dia.	Term. Hole Depth	Term. Hole Dia.	Term. Hole Depth	PRICE
758WI620	X	–	22-24	–	.075	.807	.070	1.00	$60.18
758WI628	–	X	26	.031	.040	.750	.038	1.00	$62.82
758WI630	–	X	30	.027	.036	.750	.038	1.00	$65.41

Wrapping Wire Rolls and Holders



Wire Rolls

Kynar™ Insulated, silver-plated copper conductor. UL Listed.
30 AWG (0.25mm)
Insulation Diameter 0.0195" (0.50mm)

JUST THE FACTS		
Color	100 ft. roll	1000 ft. roll
White	606WI302	606WI918
Yellow	606WI303	606WI300
Blue	606WI0300	606WI0001
Red	606WI0301	606WI103
Black	606WI0010	606WI003
PRICE	$11.39	$58.23

ok

KSW Low Force Strip Rolls

For Cut/Strip Wrap Applications

30 AWG (0.25mm) Low Strip Force, Kynar™ Insulated Wire - Diameter 0.0195" (0.50mm).

JUST THE FACTS		
Color	100 ft. roll	1000 ft. roll
White	606WI490	606WI123
Yellow	606WI494	606WI102
Blue	606WI486	606WI201
Red	606WI0031	606WI321
Black	606WI310	606WI332
PRICE	$22.60	$87.13

Fiber Optic Tools

TECHNI-TOOL

New!

Buy Both & SAVE 20%

758IE1300

758IE1200

Fiber Optic Jacket & Buffer Stripper

Two tools in one. Larger strip notch removes 3mm jacketing, smaller strip notch removes both 900 and 250 micron buffer coatings. Won't damage fiber or Kevlar®. Ergonomic non-slip comfort-grip handles. 6-1/4" OAL. **(USA)**

No. 758IE1300 .....**$26.10**

Duplex Cable Jacket Stripper

Quickly and easily strips jacket from 3mm, 2mm and 1.6mm simplex or duplex Zipcord. Won't damage Kevlar®. Ergonomic, non-slip comfort-grip handles. Precision-ground blades produce consistent clean strips. 6-3/4" OAL. **(USA)**

No. 758IE1200 .....**$35.50**

SAVE 20% WHEN YOU BUY BOTH STRIPPERS!

No. 758IE1213.....**$49.30**

MILLER®

No-Nik® Wire Stripper

For removing insulation without nicks,cuts or scrapes. Cutting apertures accurate to 0 to +.0127mm. Each tool made to strip one wire size only. Handles color-coded by size of cutter. Cutting blades are finest razor blade steel. 5-3/8" OAL. **(USA)**

Cutting Dia. .008, 34 AWG, Red
No. 680IE6188 .....**$33.24**

Cutting Dia. .010, 34 AWG, Lt. Blue
No. 680IE6190 .....**$33.24**

Cutting Dia. .012, 32 AWG, White
No. 680IE6192 .....**$33.24**

Cutting Dia. .014, 30 AWG, Dk. Green
No. 680IE6194 (Solid) **$33.24**

Cutting Dia. .016, 30 AWG, Orange
No. 680IE6196 (Stranded)**$29.55**

Cutting Dia. .025, 26 AWG, Lt. Green
No. 680IE6204 .....**$29.55**

**NOTE: Select the No-Nik diameter that is marginally larger than the conductor.*

Other Sizes Available-Call for Details

MILLER®

No Pressure Required!

Fiber Optic Cleaver

For glass fibers with 125µm nominal cladding diameters. Accommodates fibers in cable or coated form. Factory-replaceable carbide blade yields up to 5,000 cleaves. Cleave length adjustable from 6.5mm to 20mm. Will leave endface angle of 2° or less for 100% on cleaves. 5.12" OAL. **(USA)**

No. 680IE6092 .....**$263.86**

Paladin Tools

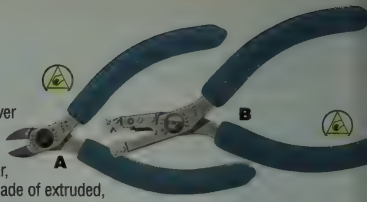
FiverOptic™ Stripper

Precision, CNC formed stripping areas for reliable, accurate strips. Strips outer jacket from 2.0-2.4mm fiber, 2.8-3.0mm and 2.0-3.0mm loose tube fiber. Strips 900um buffer from loose buffer without removing acrylate. Strips buffer and acrylate from 900/125um fiber. Ergonomic design prevents awkward wrist bend. ***One-Year Warranty.***

No. 618IE1163 .....**$49.99**

Erem

A. Tungsten Carbide Cutter



Fatigue-fee operation for over 1 million openings! Blades are precision fitted with carbide inserts to cut Kevlar, stainless wire and more. Made of extruded, 100% machined tool steel for durability. ESD safe cushion grips.

B. Precision Stripper

ESD safe, high precision side stripping tool. Strips without scratching cores. Diameter adjustable with screw plus screw stop. Supplied with screwdriver and hex key.

TT No.	Model	Head Size	Cut	Cutting Cap. (AWG)	OAL	PRICE
A 272PL599	599TFO	S	Full Flush	22 AWG Medium and Soft Wires	4-1/4"	$127.79
B 272PL552	552S	–	–	Teflon, Tefzel and Fiber Optics 30-40 AWG insulation	4-3/4"	$112.88

TECHNI-TOOL

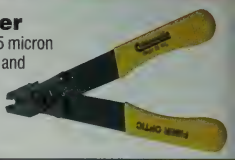
Fiber Optic Stripper

Strips 250 micron buffer coating from 125 micron optical fiber. Also strips fiber jacket with 1.0mm stripping station with no adjustment. 6-1/2" OAL. **(USA)**

No. 758PL079 .....**$34.24**

MILLER®

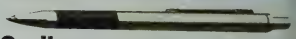
Fiber Optic Stripper



For stripping 250 micron buffer coating from 125 micron optical fiber. The .0055" (0.14mm) diameter hole and V-opening in blade allow for accurate buffer coating removal and prevents scratching or nicking. 5-3/8" OAL.

No. 680PL598 .....**$41.32**

MILLER®



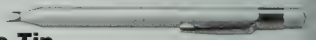
Diamond Fiber Optic Scribe

For scratch and pull scribing of fiber optic cable. Diamond tip mounted on a stainless steel shaft. Protective, retractable barrel. **(USA)**

60° Conical Shape
No. 680IE6137 .....**$38.37**

90° Wedge Shape
No. 680IE6140 .....**$78.06**

MILLER®

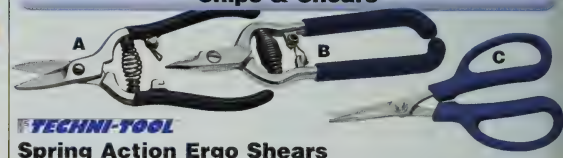


30° Wedge - Carbide Tip

Rugged, anodized aluminum casing 112mm long and 25mm diameter. **(USA)**

No. 680IE6124 4-3/8" OAL.....**$36.69**

Snips & Shears



TECHNI-TOOL

Spring Action Ergo Shears

Spring-action, 1" Kevlar snips feature a cushion grip and serrated blades to reduce hand fatigue. Great for Kevlar patch cords and thicker PVC jackets. 6-1/2" OAL. **(USA)**

A. No. 758PL744 .....**$22.56**

Hi-Leverage Kevlar Snip

6-1/2" of ergonomic cutting action. Automatic return spring, specially designed edges, cushion grip handles and top blade with precision serrated cutting edges. Ideal snip for trimming Kevlar® on fiber optic cable. Cut length: 5/8".

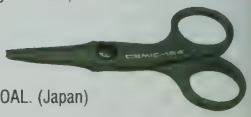
B. No. 758IE743 .....**$18.55**

Kevlar Cutting Stainless Steel Scissors

Stainless steel serrated blades make this ideal for snipping Kevlar®. Soft blue handles. Use left or right handed. Cut length: 1-5/8"; 6.75" OAL.

C. No. 758IE544.....**$10.71**

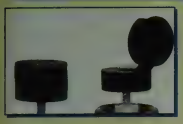
Ceramic Scissors



Durable zirconia ceramic blade insert and carbon-fiber reinforced handles for cutting Fiberglass and Aramid Fabrics. 5" OAL. (Japan)

No. 496SC124 .....**$49.95**

Fiber Optic Cleaners



FiberCare MicroCare

Fiber Connector Cleaner II

Better than IPA, non-hazardous and travel safe. Delivers reliable, repeatable and cost-effective cleaning of all types of fiber optic connectors in any location and environment. Non-flammable solvent, packaged to dispense exactly 80 mcl per pump of optically pure solvent. 400 cleanings per can.

3 oz./85g Mini-Pump Triton Dispensing Top
No. 565CH203 .....$12.00

565CH203

565CH304

FiberCare MicroCare

Optical Fiber Preparation Fluid

Provides non-flammable, environmentally-safe alternative for cleaning fibers prior to termination or fusion splicing and for cleaning connector end-faces after polishing. Better than IPA. Packaged in rugged spill-proof, non-pressurized pump spray, non-hazardous, travel-safe.

3 oz./85g Mini-Pump Triton Dispensing Top
No. 565CH304 .....$12.00

FiberCare MicroCare

Fiber Wipes

Lint-free, hydroentangled polyester fabric, ultra-pure wipes are stronger but softer and more absorbent than traditional wipes. Tub contains 90 perforated wipes. Each wipe is 4" x 2".

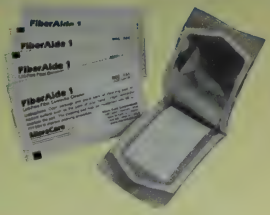
No. 565CH843 .....$7.00

FiberCare MicroCare

FiberAide™ Fiber Optic Wipes

Ideal for cleaning connector end-faces and bare fiber. Material resists tearing and linting. 2.76" x 1.57" (7 cm x 4 cm) size cleans up to six fiber optic end-faces. Individually packaged. **50/bag**

No. 565CH831 .....$24.50



FiberCare MicroCare

Fiber Optic Connector Cleaning Sticks

Works with fiber optic connector cleaner. Nibs molded - not hand woven - sintered polymer material that wicks more than fabric-style swabs. **50/Pk.**

Application guide:

Ferrule/ Connector Size	Examples	No. For Cleaning Within Alignment Sleeves (TT No)	No. For cleaning Exposed Ferrules-male (TT No)
2.5 mm	SC,ST, FC, ASC, AFC, etc.	MCC-S25 (565CH725)	MCC-P25 (565CH775)
2.0mm	Mil T 29504/14/15 for Mil C 28876	MCC-S16 (565CH716)	MCC-P25 (565CH775)
1.6mm	D4, Mil T 29504/04/05 for Mil C 38999	MCC-S16 (565CH716)	MCC-P25 (565CH775)
1.25mm	LC, MU	MCC-S12 (565CH712)	MCC-P25 (565CH775)
S. rectangular	MT-RJ (w/wo pins)	MCC-S16 (565CH716)	MCC-S16 (565CH716)
Rectangular	MPO, MTP (w/wo pins)	MCC-XMT (565CH709)	MCC-XMT (565CH709)
L. cylindrical	Bionic	MCC-XMT (565CH709)	MCC-XMT (565CH709)

No. 565CH725 (MCC-S25).....**$27.00**
No. 565CH716 (MCC-S16).....**$30.00**
No. 565CH712 (MCC-S12).....**$27.00**
No. 565CH709 (MCC-XMT) **$30.00**
No. 565CH775 (MCC-P25).....**$30.00**

10 Sticks of Each
No. 565CH805 (MCC-VMC) **$24.50**
20 Sticks MCC-S25 and MCC-P25, 10 Sticks MCC-S12
No. 565CH808 (MCC-VSC) **$24.50**

AFL Telecommunications

Cletop® Ferrule Cleaner

Automatic ferrule connector cleaner quickly and effectively cleans dust, oil, grease and debris from fiber optic connectors end face without alcohol or solvent wipes. Dry woven cloth. Includes compact, lightweight dispenser and replaceable 400 swipes reel.

Cletop A for SC, ST and FC Connectors
No. 601TE822 .....$116.00

Replacement cartridge for 601TE822 - white tape
No. 601IE215.....$26.95

Replacement cartridge for 601TE822 - blue tape
No. 601IE684.....$26.95

Cletop S LC, MTP and MT-RJ Connectors
No. 601TE823 .....$116.00

Replacement Tape for 601TE823 - white tape
No. 601IE136.....$26.95

Replacement Tape for 601TE823 - blue tape
No. 601IE017.....$26.95

ACT Cleaning Sticks

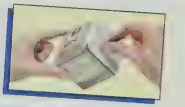
Features: Delivers a constantly high level of cleaning performance. For cleaning ferrule end-faces, inside plug-in fiber-optic connectors and various adapters. Lightweight, compact, disposable. 40 5-packs, box of 200.

Type 2.5mm
A. No. 601IE024 .....$190.00

Type 1.25mm
B. No. 601IE022 .....$197.00

Chemtronics

Fiber Optics Cleaning Kits



Installation Maintenance Kit

Used by installation and special departments to clean fiber optic end faces, 2.5mm back plane, maintain OTDR, and other T&M. **Includes:** QbE Cleaning Wipes; 5 oz. Electro-Wash PX Cleaner/Degreaser; 100 Lint-free Wipers; 50 Fiber Optic Swabs, 5 Electro-Wash MX Gel Removal Wipes; Instructions; Blue, Zippered Nylon Carrying Case.

No. 237IE1010 .....$116.87

Construction Master Kit

Includes: Same as above with 50 V-Groove and Ceramic Ferrule Cleaning Swabs; 15 Fusion Splice Mirror Cleaning Swabs; Red, Zippered Nylon Carrying Case.

No. 237IE1000 .....$144.96

Items Sold Separately:

QbE® Cleaning Platform
The precision wipe platform for cleaning fiber optic end-faces. 3" X 3".
No. 237CH222.....$45.47 200/Pk

Electro-Wash® PX Fiber Optic Cleaner
Ideal cleaner for fiber optic connectors and cables - safe for use on plastics. (Flammable - not for use on energized equipment.) 5 oz. aerosol can.
No. 237CH810 .....$11.11

Menda Service Vacuum

MENDA

Omega Field Vacuum

Clean components without disassembly while protecting from an ESD event. Ideal for cleaning tape and components from feeder trolleys on pick and place machines, insertion machines, copiers, computers, printers and more. **Features:** ESD protected vacuum with 110 VAC motor with electronic line filter; 25% better 0.3 micron filtration; Portable and quick set-up. **Includes:** ESD protected toner-proof hose; 16" gooseneck, crevice tool and brush. **(USA)**

No. 548IE859 .....**$360.80**

0.3 Micron replacement filter fits Menda Omega Field Vac, 3M and Atrix vacuums
No. 548IE853 .....**$22.54/ea**

.12 Micron HEPA replacement filter fits Menda Omega Field Vac, 3M and Atrix vacuums
No. 548IE854 .....**$44.61/ea**

Wet/Dry Vacuum

Milwaukee

New!

Battery-Operated Wet/Dry Vacuum

Powerful battery-operated motor provides strong suction and air flow. Toolbox style for easy transport and storage. On-board accessory and hose storage. Built-in blower port. Washable, reusable wet/dry filter. High efficient HEPA filter. 2 gallon capacity, 45 cu ft/min max air flow. **Includes:** Filter assembly; Crevice tool; Wide utility nozzle; Wireless vinyl hose. Battery pack and charger not included.

Works on Milwaukee 18V slide-on batteries, Li-ion or NiCd
No. 575IE0880 .....**$129.60**

Works on V28™ battery (Shown)
No. 575IE0780 .....**$129.60**

Shop-Vac®

shop-vac®

Convenient, Powerful Hand-Held Portable Vac!

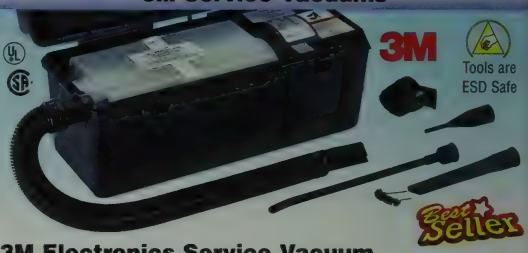
Hippo® Shop-Vac® Brand

Permanently lubricated 1.5 PHP motor. Efficient dual-filter system includes convenient disposable filter bag. Converts to a blower. **Includes:** Shoulder strap; 6'L hose; Extension wand; Crevice tool; Round brush; 6" utility floor nozzle; Conversion unit; 2-1/2" hose coupling; Secondary filter and paper filter bag. Cord length: 18'L. 120V/60Hz, 7.2A. **(USA)**

No. 705PR999 .....**$139.61**

Disposable filter bags plus prefilter – 5/pk
No. 705AC901 (90146) **$13.10**

3M Service Vacuums



3M Electronics Service Vacuum

The 3M™ vacuum is designed for high efficiency cleanup of most business equipment. Portability, quick setup and efficient safe operation are key features of this powerful unit. Filtrations system fits 2 different filters, depending upon need. All attachments store in case lid. **Specs:** Motor: 1 HP; Weight: 11-1/2 lbs. **Includes:** Type 2 filter, detachable power cord, 32" stretch hose and attachments. ***Three-year Warranty.*** **(USA)**

No. 525PO497 115V .....**$322.40** **No. 525PO498** 220V **$362.38**

Type 1 **Fine Particle Filter:** A thinner, more concentrated weave (HEPA media) for trapping extremely fine particles. Typical applications–laser printers using toners in the range of .3 to .5 microns and highly-sensitive equipment.
No. 525PO001 .....**$33.25**

Type 2 **Powder Toner and Common Dust Filter:** Designed to remove unwanted toner from copiers, laser printers and other office equipment.
No. 525PO002 ....**$18.35**

Optional Accessories
Stretch Hose, 32"
No. 105AC032.....**$32.40**

Stretch Hose, 50"
No. 105AC050.....**$61.28**

Micro Cleaning Vacuum

Includes Micro Cleaning Tool Kit!

Metro Data-Vac/1 Pro Series

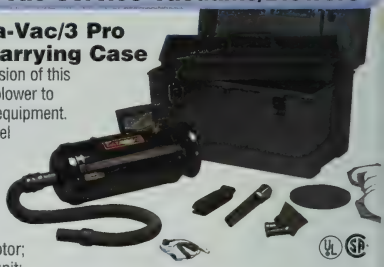
Your *Data-Vac/1* makes cleaning computer and office equipment a breeze. **Includes:** Power unit; 19" flexible hose, Crevice tool, Air pin-pointer; Soft bristle dust brush; Convenient shoulder strap; Plus five extra disposable paper bags and the new micro cleaning tool kit. *120V/60Hz, 1.73A.* ***One-Year Guarantee.*** **(USA)**

No. 555AC100 .....**$96.50**
No. 555AC026 Disposable Bags.....**$5.00 5/pk.**

Metro Data-Vac Service Vacuums/Blowers

METRO

Data-Vac/3 Pro In Carrying Case



Use the service tech version of this high-powered vacuum/blower to maintain all your office equipment. **Features:** Sturdy all steel construction; .3 micron triple filtration system (Toner filter, Disposable bag, Permanent cloth bag & Micro-filter); 1.7 HP motor; 2 speed deluxe power unit; 6' flexible hose; Pik-All, Air Pin Pointer Nozzle; Crevice tool; Snap in brush; Soft bristle dusting brush; Powerizer™ Air Maximizer and snorkel probe attachments; 2 extra toner filter disposable bags; 1 extra micro-filter; Micro cleaning tool kit; Shoulder strap & carrying case; 120V/60HZ. ***Two-Year Guarantee.*** **(USA)**

No. 555AC300 .....**$377.50**

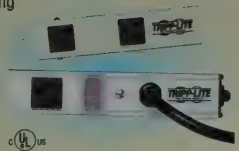
Anti-Static Data Vac/3 Pro Environmental Control System
ESD version of the vacuum kit above plus Techni-Stat "No Doubt" wrist strap and ground cord set.The four stage filtration system is 99.97% effective in trapping particles down to 0.3 microns. All tools are designed for their static-fighting capabilities.
No. 555ST003.....**$444.50**

Power Strips

Best Sellers

All metal extruded aluminum housing. Lighted power switch with locking transparent cover prevents accidental shutoff. Ideal for horizontal or vertical raceway style power distribution. 15V circuit breaker.

TT No.	Outlets	OAL	Cord Length	PRICE
794PR618	8	2 ft	15 ft	$79.00
794TE3612	12	3 ft	15 ft	$85.00
794PR620	16	4 ft	15 ft	$90.00
794PR621	20	5 ft	15 ft	$99.00



New!

Tripp Lite Power Strips with Surge Suppression

Power strips with AC surge suppression are NEMA-rated output receptacles with 450 joules surge suppression. Lighted power switch prevents accidental shutoff. ***Lifetime Warranty.***

24 outlets; 15 ft. cord, 72" length
No. 856BE1915 .....**$99.00**

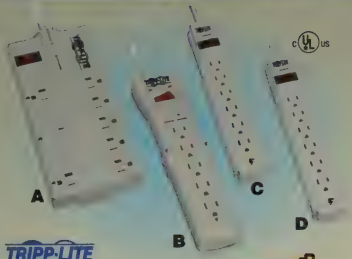
16 outlets; 15 ft. cord; 48" length
No. 856BE515 .....**$85.00**

Safety Power Strips with GFIC Plug

New!

Safely distributes power in harsh environments. Provides convenient source for multiple outlets wherever needed. Includes 6 or 8 outlets and transformer outlets and 4 safety covers; power cord features GFIC plug and wraps with hang holes; rugged metal case. ***Lifetime Limited Warranty.***

No. 794TE0825 8 outlets/25 ft. cord **$99.99**
No. 794TE0812 8 outlets/12 ft. cord **$89.99**
No. 794TE0609 6 outlets/9 ft. cord **$79.99**



New!

Protect It! Economy Surge Suppressors

Complete AC surge suppression backed by up to $75,000 lifetime insurance. Diagnostic LEDs warn of wiring problems and suppressor damage. Space-saving angled plug. Integrated child-safety outlet covers. Keyhole mounting.

A. 8 outlets, 8 ft cord, 1900 joules, $75,000 connected equipment insurance
No. 794TE808 .....**$35.99**

B. 7 outlets, 7ft. cord, 2350 joules, $75,000 insurance
No. 794PR648.....**$28.00**

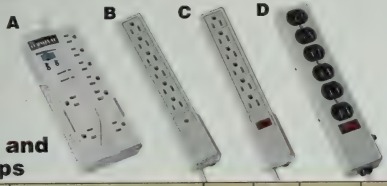
C. 6 outlets, 6 ft. cord, 750 joules, $20,000 insurance
No. 794TE606 .....**$15.99**

D. 6 outlets, 4 ft. cord, 720 joules, $20,000 insurance
No. 794TE0604 .....**$12.99**

Waber Power Strips

Workbench, wall mount or floor mount. Heavy-duty metal housing. Lighted power switch and 15A circuit breaker.

TT No.	Outlets	Grade	Cord Length	PRICE
856BE086	5	Commercial/Industrial	6 ft	$20.00
794TE004	4	Office (Premium)	6 ft	$18.85
794TE006	6	Office (Premium)	6 ft	$22.69
794TE615	6	Office (Premium)	15 ft	$29.23
856BE232	10	Commercial/Industrial	15 ft	$59.00



CENTEREX Surge Protectors and Power Strips

	TT No	No. of Outlets	Description	Joules	Cord Length	Warranty	PRICE
A	710TE7700	8	330V, 2 continuity powered outlets; Right angle plug, Transformer spacing; Safety alarm	1200	6'	Lifetime	$39.73
B	710TE3010	6	400V, LED, resettable circuit breaker	140	33"	—	$12.16
C	710TE3100	6	Switchable, circuit breaker	—	33"	2-Year	$13.02
D	710TE4210	6	Metal housing, lighted switch, resettable circuit breaker	—	—	2-Year	$18.98

BAYCO

Triple Tap Extension Cords

Contractor grade extension cords.
Specs: 15A rating; 14/3 TT wire gauge/cond.; SJTW-A insulation. (China)
No. 629TE740 25' length **$19.55**
No. 629TE741 50' length **$34.00**

2 YEAR WARRANTY

WIREMOLD legrand

Wiremold® Plug-In Outlet Center® Units

- Resettable circuit breaker for overload protection
- Snap-on/slide-off mounting
- Lighted switch except on two models where * is indicated
- 15A/120V units have a 14/3 SJT cord with a NEMA 5-15P plug
- 20A/120V units have a 12/3 SJT cord with a NEMA 5-20P plug
- Durable, Aluminum housing on all models except No. 710TE006 and No. 710TE015. Both have Plastic housings.

NEMA 5-20R

TT. No.	Type	Cord Length	No. of Outlets	Amps	OAL	Receptacle Ctr. to Ctr.	Color	PRICE
710TE207	COMPACT	6	6	15A	12-3/16"	1-1/4'	GRAY	$36.90
710TE2071	COMPACT	15'	6	15A	12-3/16"	1-1/4"	GRAY	$43.25
710TE006	COMPACT	6'	6	15A	12"	1-1/4'	PUTTY	$11.70
710TE015	COMPACT	15'	6	15A	12"	1-1/4'	PUTTY	$18.55
710TE2015	COMPACT	15'	6	20A	13-5/16"	1-1/2'	PUTTY	$103.60
710TE403	INDUSTRIAL	6	16	15A	48"	2-1/2"	GRAY	$75.70
710TE404	INDUSTRIAL	15'	16	15A	48"	2-1/2"	GRAY	$80.85
710TE2065	INDUSTRIAL	6'	24	15A	72"	2-1/2"	GRAY	$91.10
710TE2066	INDUSTRIAL	15'	24	15A	72"	2-1/2"	GRAY	$96.25

CabinetMate® Series Plug-In Outlet Center Units

2 YEAR WARRANTY

- Low profile 1-1/2" x 1-3/16" Gray Aluminum housing
- Spring clip mounting
- Resettable circuit breaker

TT No.	Cord Length	Plug	No. of Outlets	Amps	OAL	Receptacle Ctr. to Ctr.	PRICE
710TE4810	6	14/3 SJT cord NEMA 5-15P	10	15A	48"	4"	$65.40
710TE4811	15'	14/3 SJT cord NEMA 5-15P	10	15A	48"	4"	$72.20

ASSEMBLES IN 25 MINUTES-ALLEN WRENCH INCLUDED!

PROFreight Discount Shipping Available! 3 weeks from factory to CA, AZ, NV, OR, WA or ID. Standard items only. CALL FOR DETAILS!

Standard frame color is blue and non-ESD laminate is white.

Production BASICS The Ergonomic Workstation

Stand-Alone Station

These modular-component workstations offer you total flexibility and feature a durable, long-lasting, baked-on, powder-coat finish. The 1-1/4" thick industrial work surface meets your most demanding applications. Your work surface height is adjustable from 30 to 36 inches — 64" support frames are standard. The heavy-duty T-mold edge reduces the risk of the laminate chipping, breaking or cracking. Double-welded joints assure long-term station integrity. Standard frame color is blue and the non-ESD laminate is white and the ESD laminate is gray. Shipped FOB (Factory) in two weeks or less.

A. Single-Sided Workstations

30" x 48" Stand-alone station
No. 664BE1000 .....$521.00
30" x 48" Add-on station
No. 664BE1400 .....$454.00
30" x 48" ESD stand-alone station
No. 664BE0010 .....$618.00
30" x 48" ESD add-on station
No. 664BE784 .....$551.00
30" x 60" Stand-alone station
No. 664BE001 .....$549.00
30" x 60" Add-on station
No. 664BE002 .....$482.00
30" x 60" ESD stand-alone station
No. 664BE003 .....$663.00
30" x 60" ESD add-on station
No. 664BE004 .....$596.00
30" x 72" Stand-alone station
No. 664BE005 .....$572.00
30" x 72" Add-on station
No. 664BE006 .....$505.00
30" x 72" ESD stand-alone station
No. 664BE007 .....$705.00
30" x 72" ESD add-on station
No. 664BE008 .....$637.00

Back-to-Back Workstations (Not Shown)

30" x 48" Double-sided starter station
No. 664BE1040 .....$961.00
30" x 48" Double-sided add-on station
No. 664BE1440 .....$827.00
30" x 48" ESD double-sided starter station
No. 664BE1140 .....$1,154.00
30" x 48" ESD double-sided add-on station
No. 664BE1540 .....$1,020.00
30" x 60" Double-sided starter station
No. 664BE009 .....$1,016.00
30" x 60" Double-sided add-on station
No. 664BE010 .....$882.00
30" x 60" ESD double-sided starter station
No. 664BE011 .....$1,245.00
30" x 60" ESD double-sided add-on station
No. 664BE012 .....$1,111.00
30" x 72" Double-sided starter station
No. 664BE013 .....$1,057.00
30" x 72" Double-sided add-on station
No. 664BE014 .....$922.00
30" x 72" ESD double-sided starter station
No. 664BE015 .....$1,321.00
30" x 72" ESD double-sided add-on station
No. 664BE016 .....$1,187.00

36" Lengths Also Available. Call 800-832-4866 for details.

B. Surge-Protected Power Distribution

60" Power rail
No. 664BE019 .....$118.00
72" Power rail
No. 664BE020 .....$125.00

C. Stand Alone Corner Station

No. 664BE1415 30" Deep $776.00
No. 664BE515 30" Deep; ESD ..$850.00

Rails for Part Bins (Not Shown)

60" Bin rail
No. 664BE021 .....$31.00
72" Bin rail
No. 664BE022 .....$36.00

D. Shelving Systems

60" Solid metal shelf
No. 664BE029 (Not Shown) $109.00
72" Solid metal shelf
No. 664BE030 (Not Shown) $113.00
60" Wire shelf
No. 664BE031 (Not Shown) $90.00
72" Wire shelf
No. 664BE032 (Not Shown) $98.00
60" Laminated shelf 15" deep
D. No. 664BE423 .....$121.00
72" Laminated shelf 15" deep
D. No. 664BE426 .....$131.00

E. T8 Overhead Lighting Track

60" Electronic ballast light
No. 664BE017 .....$210.00
72" Electronic ballast light
No. 664BE018 .....$223.00
Under shelf light
No. 664BE523 .....$107.00

F. Drawer Units

6" Stackable drawer w/lock
No. 664BE027 .....$127.00
12" Stackable drawer w/lock
No. 664BE028 .....$159.00

G. Footrest Tubes

Adjustable footrest tubes, 60"
No. 664BE666 .....$76.00
Adjustable footrest tubes, 72"
No. 664BE667 .....$80.00

H. Footrest Plate

No. 664BE668 .....$79.00

I. Monitor Arm & Keyboard Kits

Monitor tray with double arm
No. 664BE631 (Not Shown)....$145.00
Monitor tray with single arm
No. 664BE630 (Not Shown)....$116.00
Keyboard support mounts to tray
No. 664BE628 (Not Shown).....$24.00
Fully adjustable keyboard support
No. 664BE680 (Not Shown) $136.00
Keyboard drawer with mouse slide tray
I. No. 664BE681 .....$121.00
Document holder 33"
No. 664BE353 (Not Shown) $119.00
3 Diopter magnifying lamp
No. 664BE0350 (Not Shown)....$185.00

J. Overhead Tool Rack

60" Tool track with trolley
No. 664BE343 .....$53.00
72" Tool track with trolley
No. 664BE346 .....$57.00
Tool balancer 3 lbs
K. No. 664BE357 .....$73.00

L. Fabric Covered Tack Boards

20" x 60" Fabric covered tack board
No. 664BE033 .....$120.00
20" x 72" Fabric covered tack board
No. 664BE034 .....$130.00

Storage Cabinet (Not Shown)

No. 664BE8552 48" Width $262.00
No. 664BE8551 60" Width $284.00

M. Modesty Panels

No. 664BE709 48" Width $53.00
No. 664BE712 60" Width $63.00
No. 664BE8715 72" Width $68.00

N. Peg Board

No. 664BE8722 48" Width $161.00
No. 664BE8723 60" Width $166.00
No. 664BE724 72" Width $174.00

O. Parts Bin Panel

Single Arm Parts Bin Panel
No. 664BE639 .....$119.00

P. Under Surface Shelf

No. 664BE8440 48" Width $120.00
No. 664BE8443 60" Width $132.00
No. 664BE8446 72" Width $143.00

Q. Laminated Corner Shelf

For 30" deep stations
No. 664BE8485 .....$188.00
For ESD 30" deep stations
No. 664BE8488 .....$258.00

Frame Splitter (Not Shown)

No. 664BE190 For 72" frame $99.00

R. Air Rail 2 Outlet

No. 664BE330 48" Width $70.00
No. 664BE333 60" Width $79.00
No. 664BE336 72" Width $90.00

Production BASICS

A. Electric Memory-Adjustable Workstation

One of the best investments in ergonomics. Provides effortless, electrically powered, push button height adjustment from 30" to 42". Accommodates sitting and standing tasks safely and comfortably. Ideal for multi-shift operations. Load capacity: 500 lbs.
Bench only, does not include 48" uprights (shown) for standard accessories.

No. 664BE4200 30" x 48" **$1,720.00**
No. 664BE405 30" x 60" **$1,746.00**
No. 664BE4210 30" x 72" **$1,771.00**
No. 664BE4202 36" x 48" **$1,733.00**
No. 664BE4220 36" x 60" **$1,758.00**
No. 664BE4225 36" x 72" **$1,784.00**

ESD Work Surface

No. 664BE4300 30" x 48" **$1,860.00**
No. 664BE036 30" x 60" **$1,886.00**
No. 664BE037 30" x 72" **$1,925.00**
No. 664BE4302 36" x 48" **$1,874.00**
No. 664BE4320 36" x 60" **$1,899.00**
No. 664BE4325 36" x 72" **$1,944.00**

NEED A CHAIR for your workstation?
SEE pg. 289 for the TECHNI-TOOL CHAIR LINE!

B. Hand-Crank Adjustable Work Table

Integrated hand crank allows precision positioning of table with minimum effort. Height adjustable from 30" to 42" to accommodate both sitting and standing. Dual legs support up to 450 lbs.
Bench only, does not include 48" uprights (shown) for standard accessories.

No. 664BE2005 30" x 60" **$1,152.00**
No. 664BE2020 36" x 60" **$1,173.00**
No. 664BE2010 30" x 72" **$1,225.00**
No. 664BE2025 36" x 72" **$1,244.00**

ESD Work Surface

No. 664BE2105 30" x 60".....**$1,265.00**
No. 664BE2120 36" x 60".....**$1,285.00**
No. 664BE2110 30" x 72".....**$1,336.00**
No. 664BE2125 36" x 72".....**$1,356.00**

Quad Stations & Add-ons

Stations Rated for 750 lbs. Capacity

The base systems come complete with all the necessary components and hardware to construct a back-to-back four-station configuration. Add-ons can also be added for larger configurations.
Each Station Includes:

- (2) Double Upright Open Frames
- (4) Adjustable C-Leg Supports
- (2) Adjustable 2C-Leg Supports
- (4) 30" Deep Work surfaces

Quad Station - 30" x 48"
No. 664BE1240 .....**$1,788.00**
Quad Station - 30" x 60"
No. 664BE1245 .....**$1,898.00**

A. 6" Stackable Drawer w/Lock
No. 664BE027 .....**$127.00**

B. 12" Drawer
No. 664BE028 .....**$159.00**

Twin Solder Spool Holder
No. 664BE650 .....**$33.00**

C. Tool Storage Hanger
No. 664BE8355 .....**$42.00**

D. Bin Panel Kit
No. 664BE627 .....**$178.00**

Fabric Covered Tack Board
No. 664BE8730 48" **$116.00**
No. 664BE033 60" **$120.00**

E. Universal Shelf - 18" x 48"
No. 664BE8390 .....**$123.00**
Universal Shelf - 18" x 60"
No. 664BE8393 .....**$134.00**

F. T8 Overhead Lighting Track
No. 664BE500 48" ..**$195.00**
No. 664BE017 60" ..**$210.00**

G. Bin Rail
No. 664BE300 48" **$26.00**
No. 664BE021 60" **$31.00**

Double Arm Monitor Kit
No. 664BE631 .....**$145.00**

H. Power Rail
No. 664BE320 48" ..**$108.00**
No. 664BE019 60" ..**$118.00**

Under Surface Shelf - 15" x 48"
No. 664BE8440 .....**$120.00**

Production BASICS

Production BASICS

Available in GREEN to Indicate LEAD-FREE WORK AREA!

RTW Table

Available in blue or new green that makes it easy to identify a lead-free work area. Constructed of 11- and 14-gauge steel. Four post legs are adjustable from 30" to 36". Available with a 1-1/8" thick ESD or non-ESD laminated surface with an abrasion resistant finish that keeps your unit looking virtually new through many production cycles. Finished in durable powder coat that resists chips and scratches.

TT No. Green	TT No. Blue	Description	PRICE
664BE305GR	664BE305	30" Deep X 60" Wide Standard Laminate RTW Table	$378.00
664BE105GR	664BE105	30" Deep X 60" Wide ESD Laminate RTW Table	$523.00
664BE310GR	664BE310	30" Deep X 72" Wide Standard Laminate RTW Table	$417.00
664BE110GR	664BE110	30" Deep X 72" Wide ESD Laminate RTW Table	$578.00
664BE8328GR	664BE8328	Power Panel	$86.00
664BE8468GR	664BE8468	18" Deep Riser Shelf for 60" Table	$174.00
664BE8472GR	664BE8472	18" Deep Riser Shelf for 60" ESD Table	$254.00
664BE846GR	664BE846	18" Deep Riser Shelf for 72" Table	$185.00
664BE8473GR	664BE8473	18" Deep Riser Shelf for 72" ESD Table	$265.00
664BE8477		60" RTW Underside Shelf (Black)	$74.00
664BE8478		72" RTW Underside Shelf (Black)	$79.00

Shown with Optional Riser, Power Panel, Power Rail and 12" Drawer Unit

Accessories

60" Uprights (to attach accessories)
No. 664BE540 .....**$66.00**

Overhead Arms (pair)
No. 664BE538 .....**$99.00**

Tool Trolley
No. 664BE343 .....**$53.00**

Tool Balancer
No. 664BE357 .....**$73.00**

Double Arm Bin Panel
No. 664BE627 .....**$178.00**

Basic Organizer

Convert a simple worktable to a functional workstation. Bolts directly to the surface of any existing workbench. Frame holds your choice of accessories. Load capacity: 300 lbs. Blue. *(Frame only, accessories sold separately.)*

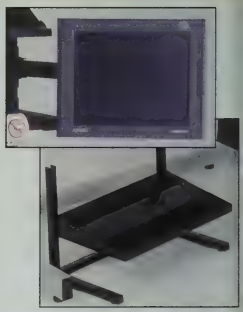
No. 664BE8542 60"W **$133.00**
No. 664BE8543 72"W **$140.00**

Production BASICS

Flat Screen Monitor Arm

Double arm swivel feature allows up/down, left/right, adjustments. Supports up to 20 lbs. Black.

No. 664BE8632 .....**$121.00**

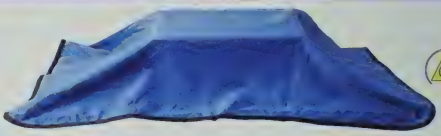


Freestanding Adjustable Footrest

80° angled foot platform with height adjustment.

No. 664BE8659 .....**$125.00**

ESD Workstation Cover



TECHNI-STAT

Provides Faraday Cage coverage over your entire workstation shielding work-in process from static, dust, etc. Made of a washable polyester filament with a carbon suffused nylon grid. **Specs:** Resistivity: 1 x 10^5 /sq.; Edges: 3/8" Bounded. **(USA)**

No. 758ST3050 24" x 24".....**$17.75**
No. 758ST3051 24" x 36".....**$39.00**
No. 758ST3052 24" x 48".....**$38.25**
No. 758ST3055 24" x 72".....**$64.75**
No. 758ST3049 30" x 48".....**$43.35**
No. 758ST3053 36" x 48".....**$60.00**
No. 758ST3054 48" x 48".....**$73.45**

IAC industries

Dimension 4 Workstations: The Best Workcenter Solution

Why the best?
Because Dimension 4 Workstations form the most well-built and versatile modular systems available, expanding to meet growing needs through a variety of additions and upgrades. Plus, D4 components are ergonomically designed to improve efficiency and productivity.

Getting Started.
The Single- or Double-Sided Starter Unit is the first building block for the Dimension 4 system. A basic unit includes two uprights, one (Single-Sided) or two (Double-Sided) laminate worksurface(s), a left and right side worksurface support bracket, worksurface support hat sections, and modesty panel for each worksurface. Adder Units are identical to Starter Units, except the Adder Unit has only one upright and is used to create additional workstations attached to the Starter Unit.

IAC Dimension 4 features

- **Modularity** – Custom-design a configuration that meets your individual needs
- **Flexibility** – Worksurfaces and accessories are independently adjustable to accommodate your needs-especially useful for multiple shifts. Worksurface height is infinitely adjustable along the uprights.
- **Quality** – Uprights of strong, rigid aluminum extrusion; steel drawers with recessed handles and full-extension metal ball-bearing slides; 180° rolled front edge on laminated worksurfaces. UL listed.
- **Selection** – Choose from a variety of ergonomic accessories, ESD options and productivity-enhancing upgrades.

DIMENSION 4 COLORS	
Powder Coat Paint	Textured Gray
Trim Color	Apollo Blue
Standard Laminate	Dove Gray
ESD Laminate	3M Gray

Five-Day Shipment!

Description	Finish	WT. (lbs.)	TT No.	PRICE
A. D4 Single-Sided Units - Standard Laminate				
30"D x 60"L x 72"H Starter	See Color Chart	185	655BE400QS	$961.00
30"D x 72"L x 72"H Starter	See Color Chart	210	655BE0074QS	$1,013.00
30"D x 60"L x 72"H Adder	See Color Chart	150	655BE405QS	$642.00
30"D x 72"L x 72"H Adder	See Color Chart	175	655BE1074QS	$698.00
D4 Single-Sided Units - ESD Laminate (Not Shown)				
30"D x 60"L x 72"H Starter	See Color Chart	185	655BE410QS	$1,141.00
30"D x 72"L x 72"H Starter	See Color Chart	210	655BE0374QS	$1,163.00
30"D x 60"L x 72"H Adder	See Color Chart	150	655BE415QS	$824.00
30"D x 72"L x 72"H Adder	See Color Chart	175	655BE1374QS	$869.00
Suspended Drawers				
B. 6" Drawer with Lock	Textured Gray	30	655BE440QS	$171.00
12" File Drawer with Lock	Textured Gray	35	655BE445QS	$239.00
C. Shelf Assembly				
12"D x 60"L Std. Laminate	Textured Gray	30	655BE450QS	$104.00
12"D x 72"L Std. Laminate	Textured Gray	36	655BE1932QS	$108.00
12"D x 60"L ESD Laminate	Textured Gray	30	655BE455QS	$189.00
12"D x 72"L ESD Laminate	Textured Gray	36	655BE1972QS	$208.00
D. Light Assembly (w/Prismatic Diffuser and 8-ft. Cord)				
60" Light Assembly	Ivory	35	655BE460QS	$276.00
72" Light Assembly	Ivory	42	655BE2303QS	$291.00

Description	Finish	WT. (lbs.)	TT No.	PRICE
E. Electrical Assembly				
60" 15 Amp w/6 outlets	Textured Gray w/ Apollo Blue Trim	15	655BE465QS	$164.00
72" 15 Amp w/6 outlets	Textured Gray w/ Apollo Blue Trim	20	655BE213	$183.00
F. Parts Cup Stringer				
60" Adjustable w/Std. Finish	Textured Black	10	655BE470QS	$66.00
60" Adjustable w/ESD Finish	Textured Black	10	655BE475QS	$85.00
Footrest				
G. 60" Tube Assembly	Bright Zinc	10	655BE480QS	$81.00
72" Tube Assembly	Bright Zinc	16	655BE2123QS	$91.00
H. 36" Ergo Footrest Pan	Ivory	10	655BE485QS	$76.00
Free Standing Footrest	Textured Black	25	655BE0028	$128.00
Productivity Accessories				
I. CRT Platform with Swivel Arm 15" x 15"	Dove Gray	20	655BE490QS	$157.00
K. 60" Tool Trolley with Slide Tool Hanger	Textured Gray	20	655BE494QS	$87.00

FREE ESD and chemical audits – just call 800-832-4866!

IAC industries

Increase your productivity with IAC's Workmaster Benches

IAC Quality: It's in the details!

- Adjustable worksurface height (from 30" to 36" in 2-in. increments)
- Heavy-gauge steel construction
- Wear-resistant powder-coat finish
- Weight capacity: 1000 lbs. static load, evenly distributed
- Recessed handles and metal ball-bearing slides on drawers
- 180° rolled front edges on laminate work surfaces
- ESD worksurfaces include a factory-installed stainless steel ground stud
- All electrical accessories include an 8-ft. power cord
- More than 25 different upgrades & accessories, including ESD options

Five-Day Shipment!

...and it all ships within 5 days* of your order!

WORKMASTER COLORS	
Powder Coat Paint	Sky Blue
	EZE Blue
Standard & ESD Laminate	White

*Ships within 5 working days after order is placed with the warehouse. Subject to availability. Number of days for delivery will vary.

Description	TT No. Sky Blue	TT No. EZE Blue	Wt. (lbs)	PRICE
A. Workmaster Basic Bench – Standard Laminate				
30"D x 48"L	655BE0000	655BE0001	100	$428.00
30"D x 60"L	655BE0003	655BE2000QS	125	$436.00
30"D x 72"L	655BE307	655BE003QS	140	$475.00
30"D x 96"L	655BE0002	655BE033	178	$556.00
36"D x 72"L	655BE367	655BE3100QS	144	$522.00
36"D x 96"L	655BE0007	655BE037QS	185	$617.00
A. Workmaster Basic Bench – ESD Laminate				
30"D x 48"L	655BE0008	655BE210	100	$528.00
30"D x 60"L	655BE3600	655BE7002QS	125	$595.00
30"D x 72"L	655BE3072	655BE024QS	140	$661.00
36"D x 72"L	655BE3672	655BE833QS	144	$738.00
36"D x 96"L	655BE0010	655BE035QS	185	$895.00
B. Leg Extender Caster Kit				
Set of 4 casters 4" - 2 locking	655BE0013	655BE493	18	$158.00
C/D/E. Suspended Drawers				
C. 6" Single drawer	655BE0006	655BE802	30	$161.00
(2) 6" single drawers	655BE0016	655BE8003	40	$299.00
D. 12" File drawer	655BE0012	655BE8004	35	$228.00
E. 12" Cabinet (left or right)	655BE012	655BE8005	30	$198.00
Lock assembly	655BE0090		1	$13.00
F. Electrical Channel Assembly – 15 Amp w/8 Outlets				
48"	655BE0019	655BE0682	13	$124.00
60"	655BE0600	655BE0683	15	$134.00
72"	655BE0072	655BE0684	17	$151.00
96"	655BE0020	655BE0022	23	$169.00
Foot Rest (Not Shown)				
48" Foot rest tube - Bright zinc	655BE0023		4	$60.00
72" Foot rest tube - Bright zinc	655BE772		6	$67.00
24" Ergo foot rest - Textured black	655BE2162		7	$72.00
Free standing - Textured black	655BE0028		25	$128.00

Description	TT No. Sky Blue	TT No. EZE Blue	Wt. (lbs)	PRICE
G. Instrument Shelf Unit - Std. Laminate				
72"L x 18"H x 15"D	655BE072	655BE0035	85	$254.00
60"L x 21.25"H x 15"D	655BE0039	655BE0522	75	$263.00
72"L x 21.25"H x 15"D	655BE0040	655BE0523	85	$282.00
96"L x 21.25"H x 15"D	655BE0041	655BE525	105	$355.00
Instrument Shelf Unit - ESD Laminate (Not Shown)				
60"L x 18"H x 15"D	655BE0060	655BE0045	75	$327.00
72"L x 18"H x 15"D	655BE3972	655BE0046	85	$363.00
60"L x 21.25"H x 15"D	655BE0051	655BE0532	75	$362.00
72"L x 21.25"H x 15"D	655BE0052	655BE0533	85	$398.00
96"L x 21.25"H x 15"D	655BE0054	655BE7535	105	$508.00
H. Electrical Riser Panel for Instrument Shelf Unit				
18"H, 115V, 15 Amp Outlets	655BE3011	655BE0055	10	$110.00
21.25"H, 115V, 15 Amp Outlets	655BE0057	655BE0059	10	$110.00
Undershelf Light Fixture for Instrument Shelf Unit (tube not included) (Not Shown)				
48" Fluorescent fixture	655BE0048		12	$128.00
General Productivity Accessories (Not Shown)				
Personal grounding block	655BE660		1	$26.00
Personal grounding kit	655BE3292		1	$52.00

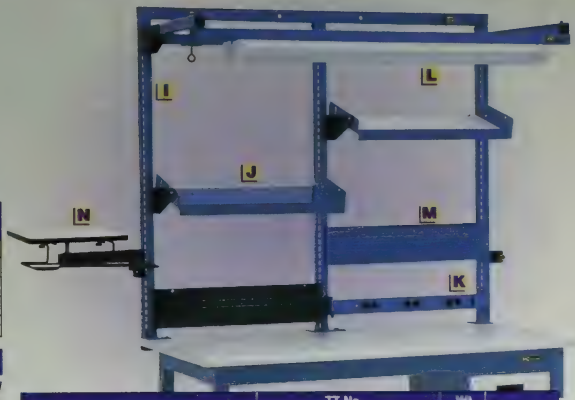
TECHNI-TOOL Tomorrow's Products Shipped Today
Phone: 1-800-832-4866 or 1-610-941-2400

Perfect for upgrading on a budget!

The Multi-Task System

Multi-Task System (MTS) upper structures enable users to configure above-the-worksurface storage and accessories on an existing workbench.*

- The MTS is available in 60" and 72" lengths, providing three 48"-high double-slotted uprights for mounting accessories. Uprights are 2" wide x 1-7/8" deep, and constructed of 12-gauge steel.
- Mounts using heavy gauge, steel c-clamp mountings that provide secure fastening to the worksurface with heavy duty thru-bolts.
- IAC workbenches are upgrade ready with threaded inserts in place in the underside of the worksurface — no drilling required!



Description	TT No. Sky Blue	TT No. EZE Blue	Wt. (lbs)	PRICE
I. Multi-Task System (MTS) Upper Structure				
48"L 2-Post frame	655BE0063	655BE0064	48	$125.00
60"L 3-Post frame	655BE0065	655BE0066	50	$178.00
72"L 3-Post frame	655BE225	655BE0069	53	$189.00
96"L 3-Post frame	655BE0070	655BE0071	60	$211.00

SEE PAGES 283-284 FOR COMPLETE IAC WORKSTATIONS!

**MTS can be retrofitted to most bench applications provided there is a clear 1-1/2" overhang in the rear. Drilling and inserting are required on the underside of the existing worksurface (a position template is supplied). Consult factory for detailed instructions if needed.*

Description	TT No. Sky Blue	TT No. EZE Blue	Wt. (lbs)	PRICE
J. Utility Shelf - 12" Deep Standard				
43.5"L (for 48" MTS) Steel	655BE0073	655BE0075	23	$115.00
26"L (for 60" MTS) Steel	655BE0076	655BE0077	15	$83.00
32"L (for 72" MTS) Steel	655BE2603	655BE0078	17	$90.00
44"L (for 96" MTS) Steel	655BE0079	655BE0080	23	$113.00
J. Utility Shelf - 12" Deep ESD Laminate				
43.5"L (for 48" MTS) ESD white laminate	655BE0081	655BE0082	23	$179.00
26"L (for 60" MTS) ESD white laminate	655BE0083	655BE0084	15	$138.00
32"L (for 72" MTS) ESD white laminate	655BE0085	655BE0086	17	$155.00
44"L (for 96" MTS) ESD white laminate	655BE0087	655BE0088	23	$188.00
K. Electrical Channel Assembly – 15 Amp w/8 Outlets				
45" (for 48" MTS frame)	655BE0089	655BE0091	15	$110.00
28" (for 60" MTS frame)	655BE0093	655BE0094	12	$97.00
34" (for 72" MTS frame)	655BE0096	655BE0098	13	$106.00
46" (for 96" MTS frame)	655BE0099	655BE0101	15	$126.00

Description	TT No. Sky Blue	TT No. EZE Blue	Wt. (lbs)	PRICE
L. Econo Light Fixture (tube not included)				
For 48" MTS frame	655BE0104	655BE0106	33	$222.00
For 60" MTS frame	655BE0107	655BE0108	35	$232.00
For 72" MTS frame	655BE0109	655BE0110	40	$241.00
For 96" MTS frame	655BE0111	655BE0113	48	$252.00
M. Multi-Rail Bin Holder - Standard Finish				
45" (for 48" MTS frame)	655BE0115	655BE0117	20	$104.00
28" (for 60" MTS frame)	655BE0118	655BE0119	15	$70.00
34" (for 72" MTS frame)	655BE0120	655BE0121	18	$74.00
46" (for 96" MTS frame)	655BE0123	655BE0124	20	$101.00
M. Multi-Rail Bin Holder - ESD, Black				
45" (for 48" MTS frame)	655BE0125		20	$132.00
34" (for 72" MTS frame)	655BE0127		18	$83.00
MTS Productivity Accessories				
N. CRT platform w/swivel arm 15" x 15" Textured black/white laminate	655BE0129		20	$189.00
Keyboard holder, Adjustable	655BE2633		3	$45.00

Stainless AdjusTable® with Overhead Systems

EAGLE GROUP

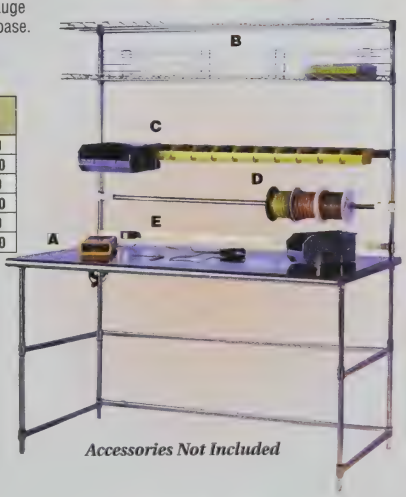
Create a stainless work surface with single or multiple cantilevered overhead system. 34-1/2" working height. Tabletops feature hat channels underneath for added strength. Cantilevered overhead system includes choice of work surface, two 33" front posts, two 63" rear posts and two "C" frames. Work surface choices are 16 gauge type 304 brushed stainless top with chrome base or 16 gauges 304 brushed stainless top with stainless base. *Order cantilever shelves separately.*

A. Work Surface

Width x Length	Wt. (lbs.)	Cubic Feet	Base	TT No.	PRICE
30" x 36"	75	4.4	Chrome	847BE3036	$757.00
30" x 36"	75	4.4	Stainless	847BE4036	$1,191.00
30" x 48"	94	5.7	Chrome	847BE3048	$896.00
30" x 48"	94	5.7	Stainless	847BE4048	$1,388.00
30" x 60"	113	7.0	Chrome	847BE3060	$1,013.00
30" x 60"	113	7.0	Stainless	847BE4060	$1,591.00

B. Cantilever Shelves

Width x Length	Wt. (lbs.)	Cubic Feet	Base	TT No.	PRICE
12" x 36"	6	0.8	Chrome	847BE1236	$56.00
12" x 36"	6	0.8	Stainless	847BE2236	$185.00
12" x 48"	8	1.0	Chrome	847BE1248	$65.00
12" x 48"	8	1.0	Stainless	847BE2248	$205.00
12" x 60"	10	1.3	Chrome	847BE1260	$75.00
12" x 60"	10	1.3	Stainless	847BE2260	$240.00



Accessories Not Included

C. Bin Holders - Chrome-plated bin holder. Accommodates supply and conductive bins. Constructed from 1-5/8" x 1/2" 12-gauge mild steel, angle-welded fo two conical collars for support. Includes two plastic split sleeves for attaching to posts.

No. 847BE036 36" .....**$28.00** **No. 847BE048** 48" .....**$29.00** **No. 847BE060** 60" **$31.00**

D. Reel Holders - Constructed from 1-1/4" x 1-1/4" x 3" chrome-plated 14 gauge "C" channel, welded to a conical collar. Includes plastic slip sleeves for attaching to posts. Rod is 5/8" diameter, 16-gauge stainless steel tubing. Tubing held in rod holders with removable 1-1/2" hairpin cotter pins.

No. 847BE136 36" .....**$63.00** **No. 847BE248** 48" .....**$66.00** **No. 847BE160** 60" **$67.00**

E. Bench Power Centers

UL-approved, 115V, 20 amp power strip with mounting hardware and 6' cord with cleat. UL

36", 5 outlets **No. 847BE236** **$292.00**
48", 7 outlets **No. 847BE348** **$294.00**
60", 9 outlets **No. 847BE260** **$297.00**

Sovella HUMAN WORKSPACE

Peg Board Worktable

Worktable with peg board and shelves provides efficient, organized work space. Purchase complete unit or as individual components. Basic worktable with peg board and shelves consists of: 30" x 60" worktable frame, 30" x 60" work surface, (3) 53" uprights with hardware, (2) 28" x 16" perforated metal panels, (2) 12" x 30" steel shelves, 30" bin rail with 7 plastic bins, 30" bin rail with 6 outlet power bar, (2) 60" light/balancer rails, 2-drawer unit.

Complete Peg Board Worktable w/Shelves and Drawer Unit
No. 429BE183 .....$1,532.91

Basic worktable frame
A. No. 429BE200 ....$230.17

Work Surface, 30" x 60"
B. No. 429BE184 ....$225.90

(3) Uprights, 53" with Mounting Brackets and Hardware
C. No. 429BE185 ....$186.63/set

Metal Panel, 28" x 16"
D. No. 429BE009.....$58.44

Steel Shelf, 12" x 30"
E. No. 429BE006 .....$43.96

30" Bin Rail w/7 Plastic Bins
F. No. 429BE186 .....$73.54

30" Bin Rail w/6 Outlet Power Bar
No. 429BE141 .....$122.22

60" Light/Balancer Rail
G. No. 429BE935 ....$638.73

2-Drawer Unit
H. No. 429BE187 ....$392.00

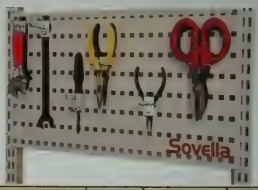
Basic Hook Set for hand tools (Not shown)
No. 429BE5102 .....$147.32

Sovella HUMAN WORKSPACE

Easily find all your tools! **New!**

Tool Shadows

Tool Shadows are an easy and inexpensive way to keep track of all the tools you use every day. Pick from any of our pre-cut tool shape stickers, affix them on any pegboard or flat surface and everyone can see instantly where tools belong and when one is missing. Basic hook set for hand tolls not included. See pricing above.**5/pk.**



	Tool	Size	TT No.	PRICE 5/pk.
	Needle nose pliers	6-1/2"	429BE845	$7.95
	Chain nose pliers	6-1/2"	429BE846	$7.95
	Slip-joint pliers	6-1/2"	429BE847	$7.95
	Lineman pliers	9-1/4"	429BE848	$8.80
	Vise grip pliers	5"	429BE849	$7.50
	Vise grip pliers	7"	429BE853	$8.50
	Vise grip pliers	10"	429BE856	$9.65
	Diagonal cutter	5"	429BE857	$7.80
	End cutting nippers	7-1/2"	429BE858	$8.70
	Wire strippers	6"	429BE859	$7.80
	Wire strippers	8"	429BE862	$8.10
	Strip master	8"	429BE863	$9.90
	Cable tie tool	-	429BE864	$9.90
	Crimper tool	-	429BE866	$9.90
	Tongue & groove pliers	5"	429BE867	$7.80
	Tongue & groove pliers	7"	429BE869	$8.50
	Tongue & groove pliers	10"	429BE870	$9.65
	Tin snips	7"	429BE871	$10.25
	Tin snips	12-1/2"	429BE872	$11.85

	Tool	Size	TT No.	PRICE 5/pk.
	Claw hammer	16 oz.	429BE873	$10.10
	Ball Pein hammer	12 oz.	429BE874	$9.90
	Dead blow hammer	21 oz.	429BE875	$9.90
	Softface hammer	32 oz.	429BE876	$9.90
	Hacksaw	10"/12"	429BE877	$15.75
	Combination square	--	429BE878	$14.80
	Adjustable wrench	6"	429BE879	$8.15
	Adjustable wrench	8"	429BE881	$8.90
	Adjustable wrench	10"	429BE882	$9.65
	Combo wrench (7-pc set)	6"	429BE883	$13.30
	Combo wrench (11-pc set)	8"	429BE884	$15.75
	Flat screwdriver	6"	429BE885	$7.20
	Phillips screwdriver	6"	429BE886	$7.20
	Nutdriver	4"	429BE887	$7.20
	Flat file	4"	429BE889	$7.45
	Round file	6"	429BE890	$7.45

Sovella HUMAN WORKSPACE

Packaging Worktable

Makes all packaging operations fast and efficient. 1/16" steel top wrapped over hardwood guaranteed for loads up to 660 lbs. Consists of solid 30" x 72" worktable frame, 30" x 72" work surface, two 53" uprights with hardware; 12" x 70" steel shelf; two 12" x 8" shelf dividers, 2" x 69" roll support tube upright and frame. Worktable can be used as a stand-alone or with additional components added later.

Complete Packaging Worktable
No. 429BE182 .....$874.58

Basic Worktable Frame
A. No. 429BE223 .....$245.71

Work Surface, 30" x 72"
B. No. 429BE177 .....$441.80

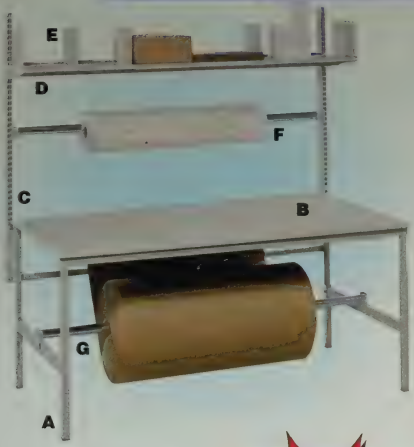
Uprights, 53" with Mounting Brackets and Hardware
C. No. 429BE178 .....$125.04/pair

Steel Shelf 69.80" x 11.81"
D. No. 429BE170 .....$158.41

Towerline Shelf divider, 12"D x 8"H
E. No. 429BE179.....$17.95/pair

Roll Support Tube, 2" x 69" w/Upright Brackets
F. No. 429BE180.....$45.97

Roll Support Tube, 2" x 69" w/Tube Frame Bracket
G. No. 429BE181 .....$47.82



Sovella HUMAN WORKSPACE

New!

MultiLine Assembly Solutions

MultiLine connects workstations to a transfer line to achieve a more flexible and controllable material flow between workstations without sacrificing usability or ergonomics.

Modular structure helps during production changes
Changeover times are minimized with modular assembly lines e.g. when implementing a new configuration or completely new product. A manual transfer system offers a more flexible and cost-efficient solution than automated assembly systems. Product lifecyclesare constantly shortening and production lines must adapt quickly and easily, often resulting in layout changes.

Material flow to effective workstations
In the assembly industry, workstations must be well planned and designed to meet the demanding needs of today's modern production environment. MultiLine is expressly designed as an accessory for Sovella workspace solutions.

Contact Techni-Tool for design assistance, components and pricing.

Low investment costs
The MultiLine transfer system has two characteristics, to lower its investment costs. First, it is integrated with an existing system, complementing current processes and thereby avoiding the need for additional investments. Second, it is built using standard parts and design, which makes it easy to adapt to any situation and space. It can also be easily and quickly modified when the layout changes.

MultiLine is Composed of:

1. Workstations
The added value work is realized in different workstations on MultiLine production units. Each workstation is built for the particular task that is accomplished in the production chain. Often MultiLine will consist of several workstations.

2. Component stocks
In the production flow, the component stocks are often built with FIFO principle: the shelving product which arrives first also leaves first. When integrated to an assembly line, FlexFlow, Sovella's FIFO solution, functions as a compact storage or buffer for in work products.

3. Buffer stocks
The buffer stocks are created in the end of the line or in bottle necks of the process. Sovella proposes either FlexFlow with FIFO principle or a buffer stock can be built on line to store semi-finished or finished items.

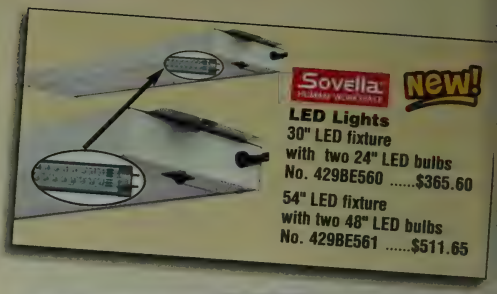
4. Conveyors
The conveyors have the simple function to transfer the processed items from stocks to workstations or vice a versa.

Single-Sided Starter Module

Includes: Upright frame, 70.86" x 30 module track support brackets for 7.87" pallet, pair of tracks with ESD rollers for 30" module.
No. 429BE5201 .....$999.25

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices. We reserve the right to correct misprints.

Concept
(Shown with Optional Add-Ons)



Sovella HUMAN WORKSPACE **New!**

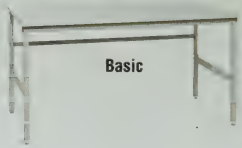
LED Lights
30" LED fixture with two 24" LED bulbs
No. 429BE560 .....$365.60
54" LED fixture with two 48" LED bulbs
No. 429BE561 .....$511.65

Towerline - *Double Sided*
(Shown w/Optional Add-Ons)

Sovella HUMAN WORKSPACE

Workstations

- ESD powder coat paint comes standard on all GWS Basic, Concept and Towerline Benches
- Power Strips double as bin rails for easy storage
- Light rails come standard with a tool trolley
- Height adjustable stations are available in either motorized or hand crank models



Basic

Concept workstation components fit together seamlessly and offer infinite adjustments. Modular design provides total integration with existing systems and future needs. Height adjustments are stepless from 26.378" to 44.09". 1100 lbs. capacity.

Basic workstations are standard tables Suitable for a broad range of applications. Height adjustments are stepless from 25.59" to 35.43" making them ideal for either sitting or standing. 660 lbs. capacity.

Towerline workstations are designed to ergonomically accommodate electronic instruments and other equipment. Sturdy, elegant and flexible. Height adjustments are stepless from 27.55" to 44.09". 660 lbs. capacity.

CONCEPT AND BASIC WORKSTATIONS

TT No.	Model	Laminate	Size	PRICE
429BE131	Concept	STD	30" x 60"	$874.05
429BE132	Concept	STD	30" x 72"	$846.19
429BE133	Concept	ESD	30" x 60"	$1,020.10
429BE134	Concept	ESD	30" x 72"	$988.70
429BE135	Basic	STD	30" x 60"	$397.17
429BE136	Basic	STD	30" x 72"	$456.93
429BE137	Basic	ESD	30" x 60"	$524.96
429BE138	Basic	ESD	30" x 72"	$602.19
429BE139	2 x M30 upright system		60" x 51.8"	$161.90
429BE140	2 x M36 upright system		72" x 51.8"	$264.04
429BE006	M30 steel shelf		29.13" x 11.81"	$43.96
429BE019	M30 steel shelf		29.13" x 15.75"	$52.42
429BE058	M36 steel shelf		35.03" x 11.81"	$48.58
429BE076	M36 steel shelf		35.03" x 15.75"	$59.08
429BE141	M30 6 outlet power strip		30"	$122.22
429BE142	M36 6 outlet power strip		36"	$126.22
429BE007	M30 suspension/bin rail		29.21" x 2.13"	$21.71
429BE143	M36 suspension/bin rail		35.23" x 2.13	$23.04

TOWERLINE WORKSTATIONS

TT No.	Model	Laminate	Size	PRICE
429BE148	M60 single sided	STD	32.87" x 60"	$1,247.82
429BE149	M60 add on	STD	32.87" x 60"	$1,015.00
429BE150	M60 single sided	ESD	32.87 x 60"	$1,287.99
429BE151	M60 add on	ESD	32.87" 60"	$1,055.17
429BE152	M72 single sided	STD	32.87" x 72"	$1,285.97
429BE153	M72 add on	Std	32.87" x 72"	$1,052.78
429BE154	M72 single sided	ESD	32.87" x 72"	$1,382.15
429BE155	M72 add on	ESD	32.87" x 72"	$1,148.96
429BE160	M60 double sided	STD	59.05" x 60"	$1,825.02
429BE161	M60 double sided add on	STD	59.05" x 60"	$1,573.98
429BE162	M60 double sided	ESD	59.05" x 60"	$1,856.93
429BE163	M60 double sided add on	ESD	59.05" x 60"	$1,605.89
429BE164	M72 double sided	STD	59.05" x 72"	$1,902.11
429BE165	M72 double sided add on	STD	59.05" x 72"	$1,651.09
429BE166	M72 double sided	ESD	59.05" x 72"	$1,972.07
429BE167	M72 double sided add on	ESD	59.05" x 72"	$1,721.05
429BE168	M60 steel shelf		57.75" x 11.81"	$132.75
429BE169	M60 steel shelf		57.75" x 15.74"	$141.01
429BE170	M72 steel shelf		69.80" x 11.81"	$158.41
429BE171	M72 steel shelf		69.80" x 15.74"	$168.59
429BE050	Blue accent stripe - pair		63.58" x 3.15"	$37.11
429BE172	Green accent stripe - pair		63.58" x 3.15"	$37.11
429BE173	Red accent stripe - pair		63.58" x 3.15"	$37.11
429BE174	Yellow accent stripe - pair		63.58" x 3.15"	$37.11

TECHNI-TOOL® MADE in the USA

Top Quality Chairs at ECONOMY Chair PRICES!

Industrial Chairs

All the features of the Economy Industrial Chair with a larger seat and back, in your choice of black or gray.

TT No.	Height Adj.	Height w/Casters	Seat W x D x T	Back W x H x T	Vertical Back Adj.	Horiz. Back Adj.	Base	Adj. Footring	Color	PRICE
758BE026	23" to 33"	24" to 34"	16-1/2"W 15"D 3-3/4"T	16"W 10"H 2"T	3"	5"	27"	18" Reinforced Plastic	—	$151.65
758BE060BK	16" to 21"	17" to 22"	18"W 17"D 2-3/4"T	17"W 18"H 3"T	3-3/8"	2-3/4"	23"	—	Black	$170.00
758BE060GY									Gray	$170.00
758BE065BK	22" to 32"	23" to 33"					27"	18" Reinforced Plastic	Black	$220.75
758BE065GY									Gray	$220.75

Poly Stool

Durable, easy to clean, polyurethane stool is stain- and puncture-resistant. Ergonomic back and seat with ventilation ribs. Five-leg reinforced plastic base with adjustable footring and mushroom glides. Gray only.

TT No.	Height Adj.	Seat W x D x T	Back W x H x T	Vertical Back Adj.	Horizontal Back Tilt Adjustments: Seat	Horizontal Back Tilt Adjustments: Back	Adj. Footring	PRICE
758BE075	22"–32"	18-1/2" x 17 x 1-1/2"	16-1/2" x 12-1/2" x 1	6	6° Rearward 6° Forward	11° Forward 15° Rearward	18" Reinforced Plastic	$239.05

2" Dual Wheel Hard Floor Casters: Fit Economy Industrial or Industrial Chairs and Poly Stool.
No. 190BE455 ..... **$11.00**

Deluxe ESD Chairs

All the features of the Economy ESD Chair but with a bigger seat and back and your choice of three colors.

TT No.	Height Adj.	Height w/Casters	Seat W x D x T	Back W x H x T	Vertical Back Adj.	Horiz. Back Adj.	Base	Adj. Footring	Color	PRICE
758BE0020	17"–22"	18"–23"	16-1/2" x 15 x 3-3/4"	16" x 10" x 2"	3-3/8"	2-3/4"	23"	—	—	$278.55
758BE0025	23"–33"	24"–34"					27"	18" ESD Chrome		$324.40
758BE098NB	23"–33"	24"–34"	18" x 17" x 2-3/4"	17-1/2" x 19" x 4"	3-3/8"	2-3/4"	27"	18" ESD Chrome	Navy Blue	$381.70
758BE098CH									Charcoal	
758BE098S									Slate	

2" Dual Wheel Hard Floor Casters: Fit Economy and Deluxe ESD Chairs.
No. 190BE118 ..... **$40.00**

BEVCO®

11000 Series Chairs

Easy to clean and maintain chairs with reinforced plastic base and optional removable/replaceable upholstered seat and back pads. No tools required for assembly. Arms not included. Includes mushroom glides. Black frame and base. ***12-Year Warranty on chair, 2-year warranty on upholstery sets.***

TT No.	Model	Seat Height	Footring	Base Size	PRICE
190BE040	11000	15" - 22"	None	23"	$120.00
190BE042	11300	19" - 27"	18" Adjustable Chrome	27"	$145.00
190BE043	11500	22" - 32"	18" Adjustable Chrome	27"	$145.00

11000 Series Seating Options

TT No.	Description	PRICE
190BE056	Upholstered seat cushion*	$24.00
190BE057	Upholstered back cushion*	$24.00

**Specify upholstered back and seat colors when ordering: Black, Navy, Royal Blue, Gray, Burgundy.*

TT No.	Description	PRICE
190BE044	Loop arm set	$25.00
190AC3850	Hard floor casters	$11.00
190BE850	Carpet Casters	$6.00

BEVCO

All Bevco Chairs have a 12-Year Intensive Use Guarantee and a Lifetime Guarantee on the Pneumatic Cylinder.

9000 Series Deluxe Seating

Bevco's top-of-the-line series delivers body support for all-day comfort. Five leg brightly polished aluminum base, 20"W x 18"D x 3" thick seat, 17.5"W x 16"H x 4" thick back. Mushroom glides come standard on all models. Fabric is standard on all non cleanroom chairs, cleanroom chairs come standard with vinyl covering.
12-Year "Top to Bottom" Guarantee on all models with a lifetime guarantee on the pneumatic cylinder.

Custom Made for You!

Ships within 5 Days

9000 Series

TT No.	Model	Covering	Height Adjustment	Weight (lbs.)	Tilt	20" Adj. Footring	ESD	PRICE
190BE9050MS	9050M-S	Standard	17" - 22.25"	31	N	N	N	$242.00
190BE9350MS	9350M-S	Standard	20" - 27.5"	38	N	Y	N	$273.00
190BE9550MS	9550M-S	Standard	24" - 34"	38.5	N	Y	N	$273.00
190BE9051MS	9051M-S	Standard	17" - 22.25"	31	Y	N	N	$272.00
190BE9351MS	9351M-S	Standard	20" - 27.5"	38	Y	Y	N	$307.00
190BE9551MS	9551M-S	Standard	24" - 34"	38.5	Y	Y	N	$307.00
190BE9050ME	9050M-E	ESD	17" - 22.25"	31	N	N	Y	$326.00
190BE9350ME	9350M-E	ESD	20" - 27.5"	38	N	Y	Y	$358.00
190BE9550ME	9550M-E	ESD	24" - 34"	38.5	N	Y	Y	$358.00
190BE9051ME	9051M-E	ESD	17" - 22.25"	31	Y	N	Y	$368.00
190BE9351ME	9351M-E	ESD	20" - 27.5"	38	Y	Y	Y	$404.00
190BE9551ME	9551M-E	ESD	24" - 34"	38.5	Y	Y	Y	$404.00

9000 Series Deluxe Cleanroom Seating

Height Adj.	Wt. (lbs.)	Tilt	ESD	CLASS 10000			CLASS 1000			CLASS 100			CLASS 10		
				TT No.	Model	PRICE	TT No.	Model	PRICE	TT No.	Model	PRICE	TT No.	Model	PRICE
17" - 22.25"	31	N	N	190BE9050MC4	9050MC4	$277.00	190BE9050MC3	9050MC3	$318.00	190BE9050MC2	9050MC2	$370.00	190BE9050MC1	9050MC1	$377.00
20" - 27.5"	38	N	N	190BE9350MC4	9350MC4	$333.00	190BE9350MC3	9350MC3	$354.00	190BE9350MC2	9350MC2	$402.00	190BE9350MC1	9350MC1	$411.00
24" - 34"	38.5	N	N	190BE9550MC4	9550MC4	$333.00	190BE9550MC3	9550MC3	$354.00	190BE9550MC2	9550MC2	$402.00	190BE9550MC1	9550MC1	$411.00
17" - 22.25"	31	Y	N	190BE9051MC4	9051MC4	$339.00	190BE9051MC3	9051MC3	$366.00	190BE9051MC2	9051MC2	$412.00	190BE9051MC1	9051MC1	$416.00
20" - 27.5"	38	Y	N	190BE9351MC4	9351MC4	$392.00	190BE9351MC3	9351MC3	$407.00	190BE9351MC2	9351MC2	$448.00	190BE9351MC1	9351MC1	$463.00
24" - 34"	38.5	Y	N	190BE9551MC4	9551MC4	$392.00	190BE9551MC3	9551MC3	$407.00	190BE9551MC2	9551MC2	$448.00	190BE9551MC1	9551MC1	$463.00
17" - 22.25"	31	N	Y	190BE9050ME4	9050ME4	$348.00	190BE9050ME3	9050ME3	$352.00	190BE9050ME2	9050ME2	$398.00	190BE9050ME1	9050ME1	$492.00
20" - 27.5"	38	N	Y	190BE9350ME4	9350ME4	$382.00	190BE9350ME3	9350ME3	$385.00	190BE9350ME2	9350ME2	$430.00	190BE9350ME1	9350ME1	$524.00
24" - 34"	38.5	N	Y	190BE9550ME4	9550ME4	$382.00	190BE9550ME3	9550ME3	$385.00	190BE9550ME2	9550ME2	$430.00	190BE9550ME1	9550ME1	$524.00
17" - 22.25"	31	Y	Y	190BE9051ME4	9051ME4	$392.00	190BE9051ME3	9051ME3	$396.00	190BE9051ME2	9051ME2	$440.00	190BE9051ME1	9051ME1	$534.00
20" - 27.5"	38	Y	Y	190BE9351ME4	9351ME4	$430.00	190BE9351ME3	9351ME3	$433.00	190BE9351ME2	9351ME2	$476.00	190BE9351ME1	9351ME1	$570.00
24" - 34"	38.5	Y	Y	190BE9551ME4	9551ME4	$430.00	190BE9551ME3	9551ME3	$433.00	190BE9551ME2	9551ME2	$476.00	190BE9551ME1	9551ME1	$570.00

9000 Series Seating Options

TT No.	Description	Wt.	PRICE
190BE0505	Dual Wheel ESD Hard Floor Casters	1.9	$40.00
190BE0226	Dual Wheel ESD Carpet Casters	2.5	$33.00
190BE0128	Dual Wheel ESD Interval Brake Casters	0.5	$41.00
190AC3850	Dual Wheel Hard Floor Casters	0.5	$11.00
190BE850	Dual Wheel Carpet Casters	0.5	$6.00

TT No.	Description	Wt.	PRICE
190BE0130	Dual Wheel Interval Brake Casters	0.5	$33.00
190BE5800	ESD Adjustable Arms	8	$59.00
190BE524	Adjustable Arms	8	$40.00
190BE345	1 Mega Ohm Resistor	–	$23.00

8000 Series Ergonomic ESD Seating

Affordable ergonomic seating for your electronics applications. **Features:** Heavy-duty conductive fabric, surface resistivity of 10^7 Ω/sq.; Pneumatic height adjustment with 360° swivel; Waterfall seat; Large, fully-adjustable back; Sturdy, 5-leg base with heavy-duty conductive plastic mushroom glides and drop chain. Dimensions: Seat: 18"W x 17"D x 2.75"T; Back: 16"W x 10"D x 2"T; Specify colors when ordering: Static Control Cloth: Slate Blue, Navy, Gray, Charcoal or ESD Vinyl: Royal Blue, Black. *Adjustable arms available on all tilt models.* **(USA)**

Best Seller

Ships within 5 Days

8000 Series

TT No.	Model	Ht. Adj.	Tilt	Footring	Base	Wt. (lbs.)	PRICE
190BE8000	8050	18"-23"	N	N	5 Star Aluminum	23	$294.00
190BE8001	8051	18"-23"	Y	N	5 Star Aluminum	27	$344.00
190BE820	8200	20"-25"	N	Welded Chrome	Tubular Steel	26	$322.00
190BE8201	8201	20"-25"	Y	Welded Chrome	Tubular Steel	30	$367.00
190BE8350	8350	20"-27.5"	N	18" Adj Chrome	5 Star Chrome	30	$318.00
190BE8351	8351	20"-27.5"	Y	18" Adj Chrome	5 Star Chrome	34	$368.00
190BE8500	8550	24"-34"	N	18" Adj Chrome	5 Star Chrome	30	$318.00
190BE8501	8551	24"-34"	Y	18" Adj Chrome	5 Star Chrome	34	$368.00
190BE8600	8600	25"-30"	N	Welded Chrome	Tubular Steel	27	$324.00
190BE8601	8601	25"-30"	Y	Welded Chrome	Tubular Steel	31	$369.00

8000 Series ESD Seating Options

TT No.	Description	Wt. (lbs.)	PRICE
190BE205	20" Adjustable ESD Chrome Footring-8500, 8501	0	$9.00
190BE0226	Dual Wheel ESD Carpet Casters Adds 1"	0.5	$33.00
190BE0505	Dual Wheel ESD Hard Floor Casters Adds 1"	0.5	$40.00
190BE0225	ESD Safe Dual Wheel Interval Brake Casters Adds 1"	2.5	$83.35

TT No.	Description	Wt. (lbs.)	PRICE
190BE5800	Ergonomic ESD Adjustable Arms	8	$59.00
190BE345	1MΩ Resistor	0	$23.00
190AC052	Larger Seat With ESD Cloth Upholstery	0.25	$12.20
190AC1616	Larger Back With ESD Cloth Upholstery	2	$27.00

Color Selections For All BEVCO Models

Standard Fabrics						Standard & Static Control Vinyl		Static Control Fabric				Polyurethane					
Burgundy	Medium Blue	Royal Blue	Navy Blue	Gray	Black	Royal Blue	Black	Slate Blue	Navy Blue	Gray	Charcoal	Gray	Blue	Burgundy	Yellow	Green	Black

7000E Series ESD Polyurethane Seating

These ergonomic chairs come pneumatic height adjustment, polyurethane seat with waterfall, fully adjustable polyurethane backrest with lumbar support, 360° swivel, and five legged base with heavy-duty plastic ESD glides and drag chain. All conductive components with surface resistance of up to 10^8 -/sq. **Specs:** Seat 18-1/2"W x 17"D x 1-1/2"T; Back; 16-1/2"W x 12-1/2"D x 1"T, Covering Type: ESD Polyurethane. Color: Black. **(USA)**

TT No.	Model	Ht. Adj.	Tilt	Footring	Base	Wt. (lbs.)	PRICE
190BE7200E	7200E	19"-24"	N	Welded Chrome	Tubular Steel	32	$346.00
190BE7205	7201E	19"-24"	Y	Welded Chrome	Tubular Steel	34	$413.00
190BE7600E	7600E	24"-29"	N	Welded Chrome	Tubular Steel	32	$352.00
190BE0761	7601E	24"-29"	Y	Welded Chrome	Tubular Steel	35	$401.00

7000E Series ESD Polyurethane Seating Options

TT No.	Description	Wt. (lbs.)	PRICE
190BE800	Dual Wheel ESD Carpet Casters - Adds 1"	0.5	$33.00
190BE118	Dual Wheel ESD Hard Floor Casters - Adds 2"	0.5	$40.00
190BE1234	ESD Safe Dual Wheel Interval Brake Casters - Adds 1"	2.5	$41.00

TT No.	Description	Wt. (lbs.)	PRICE
190BE345	1M- Resistor	0	$23.00
190BE0004	Ergonomic ESD Adjustable Arm - Tilt Models Only	8	$69.00
190BE0005	ESD/Cleanroom Class 10 Polyurethane Chair Upgrade	0	$19.00

7000D Series Durable Polyurethane Seating

Designed for outstanding comfort and longer use in the toughest workplace environment. Offer total body support with advanced ergonomic features that improve productivity and reduce worker fatigue. **Includes:** pneumatic height adjustment; large waterfall seat; fully adjustable lumbar support back, 5-legged base with either heavy-duty plastic mushroom or rubber cushion metal glides, and 360 degree swivel. Covering type: Polyurethane; Color: Black. **(USA)**

TT No.	Model	Ht. Adj	Tilt	Footring	Base	Glides	Wt. (lbs.)	PRICE
190BE012	7000D	15"-20"	N	N	23" 5 Star Plastic	HD MG	30.5	$203.00
190BE014	7001D	15"-20"	Y	N	23" 5 Star Plastic	HD MG	32.5	$266.00
190BE016	7200D	18"-23"	N	Welded Chrome	Tubular Steel	RCMG	33.5	$247.00
190BE018	7201D	18"-23"	Y	Welded Chrome	Tubular Steel	RCMG	35.5	$314.00
190BE7300D	7300D	19"-26.5"	N	18" Adj Chrome	27" 5 Star Plastic	HD MG	36.5	$219.00
190BE7301D	7301D	19"-26.5"	Y	18" Adj Chrome	27" 5 Star Plastic	HD MG	38.5	$271.00
190BE705	7500D	21"-31"	N	18" Adj Chrome	27" 5 Star Plastic	HD MG	36.5	$219.00
190BE501	7501D	21"-31"	Y	18" Adj Chrome	27" 5 Star Plastic	HD MG	38.5	$271.00
190BE020	7600D	23"-28"	N	Welded Chrome	Tubular Steel	RCMG	33.5	$249.00
190BE024	7601D	23"-28"	Y	Welded Chrome	Tubular Steel	RCMG	36.5	$316.00

7000D Series Durable Polyurethane Seating Options

TT No.	Description	Wt. (lbs.)	PRICE
190BE103	20" Adjustable Chrome Footring -7300D,7301D,7500D,7501D	1	$9.00
190BE850	Dual Wheel Carpet Casters- 7000D,7001D,7300D,7301D,7500D,7501D Adds 1"	0.5	$6.00
190BE390	Dual Wheel Carpet Casters-7200D,7201D,7600D, 7601D Adds 2"	0.5	$6.00
190AC3850	Dual Wheel Hard Floor Casters- 7000D,7001D,7300D,7301D,7500D,7501D Adds 1"	0.5	$11.00

TT No.	Description	Wt. (lbs.)	PRICE
190BE960	Dual Wheel Hard Floor Casters- 7200D,7201D,7600D,7601D Adds 2"	0.5	$11.00
190BE7602	Mushroom Glides-7200D,7201D,7600D,7601D Adds 1"	0.5	$7.00
190AC650	All-Chrome Base	0	$14.00
190BE590	Ergonomic Adjustable Arms - 7001D,7201D,7301D,7501D,7601D	8	$52.00

7000 Silver Series Industrial, Cleanroom & ESD Seating

Designed for outstanding comfort and long lasting use. **Features:** durable black skinned polyurethane waterfall seat and fully adjustable back resists stains and damage from punctures, water, chemicals and grease, Sturdy, 5-legged polished 5 Star aluminum base with either ESD or heavy duty plastic mushroom glides. Chrome plated cylinder and backrest assembly. Pneumatic height adjustment with 360 degree swivel. All models are Mil Std 209 Class 10 Cleanroom certified. Dimensions: Seat: 18.5"W x 17"D x 1.5"T; Back: 16.5"W x 12.5"H x 1"T. ESD models surface resistivity of 10^8 -/sq. and include drag chain. Specify colors when Ordering: Black, Blue, Green, Gray, Burgundy, and Yellow. ESD models in Black only. **(USA)**

TT No.	Model	Ht. Adj	Tilt	Covering Type	Footring	Glides	Wt. (lbs.)	PRICE
190BE7050	7050	16"-21"	N	Polyurethane	N	HD MG	30	$251.00
190BE7051	7051	16"-21"	Y	Polyurethane	N	HD MG	32	$292.00
190BE7350	7350	19"-26.5"	N	Polyurethane	18" Adj Chrome	HD MG	36	$298.00
190BE7351	7351	19"-26.5"	Y	Polyurethane	18" Adj Chrome	HD MG	38	$346.00
190BE7550	7550	22"-32"	N	Polyurethane	18" Adj Chrome	HD MG	36	$298.00
190BE7551	7551	22"-32"	Y	Polyurethane	18" Adj Chrome	HD MG	38	$335.00
190BE0070	7050E	16"-21"	N	ESD Polyurethane	N	ESD MG	30	$336.00
190BE0051	7051E	16"-21"	Y	ESD Polyurethane	N	ESD MG	32	$385.00
190BE7350E	7350E	19"-26.5"	N	ESD Polyurethane	18" Adj ESD Chrome	ESD MG	36	$374.00
190BE7351E	7351E	19"-26.5"	Y	ESD Polyurethane	18" Adj ESD Chrome	ESD MG	38	$434.00
190BE755	7550E	22"-32"	N	ESD Polyurethane	18" Adj ESD Chrome	ESD MG	36	$374.00
190BE751	7551E	22"-32"	Y	ESD Polyurethane	18" Adj ESD Chrome	ESD MG	38	$434.00

Please See Next Page For The 7000 Silver Series Industrial, Cleanroom & ESD Seating Options

All Bevco Chairs have a 12-Year Intensive Use Guarantee and a Lifetime Guarantee on the Pneumatic Cylinder.

BEVCO

7000 Silver Series Industrial, Cleanroom & ESD Seating Options (Continued From Page 291)

TT No.	Description	Wt. (lbs.)	PRICE
190BE103	20" Adjustable Chrome Footring-7350,7351,7550,7551	0	$9.00
190BE205	20" Adjustable ESD Chrome Footring-7350E,7351E,7550E,7551E	0	$9.00
190BE850	Dual Wheel Carpet Casters Adds 1"	0.5	$6.00
190AC3850	Dual Wheel Hard Floor Casters Adds 1"	0.5	$11.00

TT No.	Description	Wt. (lbs.)	PRICE
190BE1234	ESD Safe Dual Wheel interval Brake Adds 1"	2.5	$41.00
190BE0226	Dual Wheel ESD Carpet Casters Adds 1"	0.5	$33.00
190BE0505	Dual Wheel ESD Hard Floor Casters Adds 1"	0.5	$40.00
190BE590	Ergonomic Adjustable Arms	8	$52.00
190BE187	Ergonomic ESD Adjustable Arms	9	$69.00

7000 Series Ergonomic Polyurethane Seating

Designed for heavy duty use in the busiest shop floor environments. **Features:** Easy-to-clean polyurethane seat with waterfall design; Pneumatic seat height adjustment with 360° swivel; Fully adjustable, comfort contour, lumbar support polyurethane backrest; Sturdy, 5-legged plastic base or tubular steel base with either heavy-duty plastic mushroom guides or rubber cushion metal guilds and chrome footring. Dimensions: 18-1/2"W x 17"D x 1-1/2"T; Backrest: 16-1/2"W x 12-1/2"D x 1"T. Specify colors when ordering: Black, Blue, Green, Gray, Burgundy and Yellow. **(USA)**

TT No.	Model	Ht. Adj	Tilt	Footring	Base	Glides	Wt. (lbs.)	PRICE
190BE7000	7000	15"-20"	N	N	23" 5 Star Plastic	HD MG	28	$179.00
190BE7001	7001	15"-20"	Y	N	23" 5 Star Plastic	HD MG	30	$233.00
190BE7200	7200	18"-23"	N	Welded Chrome	Tubular Steel	RCMG	31	$233.00
190BE7201	7201	18"-23"	Y	Welded Chrome	Tubular Steel	RCMG	33	$291.00
190BE7300	7300	19"-26.5"	N	18" Adj Chrome	27" 5 Star Plastic	HD MG	34	$203.00
190BE7301	7301	19"-26.5"	Y	18" Adj Chrome	27" 5 Star Plastic	HD MG	36	$256.00
190BE750	7500	21"-31"	N	18" Adj Chrome	27" 5 Star Plastic	HD MG	34	$203.00
190BE7501	7501	21"-31"	Y	18" Adj Chrome	27" 5 Star Plastic	HD MG	36	$256.00
190BE7600	7600	23"-28"	N	Welded Chrome	Tubular Steel	RCMG	31	$234.00
190BE7601	7601	23"-28"	Y	Welded Chrome	Tubular Steel	RCMG	34	$293.00

7000 Series Ergonomic Polyurethane Seating Options

TT No.	Description	Wt. (lbs.)	PRICE
190BE850	Dual Wheel Carpet Casters–7000,7001,7300,7301,7500,7501 Adds 1"	0.5	$6.00
190BE390	Dual Wheel Carpet Casters–7200,7201,7600,7601 Adds 2"	0.5	$6.00
190AC3850	Dual Wheel Hard Floor Casters–7000,7001,7300,7301,7500,7501 Adds 1"	0.5	$11.00
190BE960	Dual Wheel Hard Floor Casters–7200,7201,7600,7601 Adds 2"	0.5	$11.00

TT No.	Description	Wt. (lbs.)	PRICE
190BE7602	Mushroom Glides–7200,7201,7600,7601 Adds 1"	0.5	$7.00
190BE590	Ergonomic Adjustable Arms–7001,7201,7301,7501,7601	8	$52.00
190BE103	20" Adjustable Chrome Footring–7300,7301,7500,7501	1	$9.00

6000 Series Advanced Ergonomic Seating

Improves total body support and physical comfort. Features independent tilt adjustment of seat and backrest. Add optional arms for maximum ergonomic benefit. **Features:** Pneumatic seat height; sturdy black, scuff-resistant, glass reinforced 5-legged, 5-Star plastic base with heavy-duty plastic glides; 20"W x 18"D x 3"T seat with waterfall front evenly supports legs and thighs; 17"W x 18"H x 3"T backrest for back support. DuPont Teflon protected Olefin fabric meets flame retardant standards. Specify color when ordering: Vinyl: Royal Blue, Black; Standard Fabrics: Burgundy, Medium Blue, Navy, Gray, Black. **(USA)**

TT No.	Model	Ht Adj	Tilt	Footring	Wt (lbs)	PRICE
190BE600	6000	17"-22"	N	N	26	$198.00
190BE6001	6001	17"-22"	Y	N	30	$249.00
190BE603	6003	18"-23"	Y	N	35	$318.00
190BE633	6300	20"-27.5"	N	18" Adj Chrome	32	$245.00
190BE6301	6301	20"-27.5"	Y	18" Adj Chrome	35	$296.00
190BE6500	6500	24"-34"	N	18" Adj Chrome	32	$245.00
190BE6501	6501	24"-34"	Y	18" Adj Chrome	35	$296.00

6000 Series Advanced Ergonomic Seating Options

TT No.	Description	Wt. (lbs.)	PRICE
190BE103	20" Adjustable Chrome Footring - 6300, 6301, 6500, 6501	1	$9.00
190AC4550	Dual Wheel Carpet Caster Adds 1"	0.5	$6.00
190BE455	Dual Wheel Hard Floor Casters Adds 1"	0.5	$11.00
190BE030	Extra-Large, Executive Style Backrest	2	$23.00

TT No.	Description	Wt. (lbs.)	PRICE
190BE524	Ergonomic Adjustable Arms - All but 6003	8	$40.00
190BE590	Ergonomic Adjustable Arms - For 6003	8	$52.00
190BE4584	Telescoping Bellows to Cover Pneumatic Cylinder	0.5	$5.00

Color Selections For All BEVCO Models

5000 Series Ergonomic Upholstered Seating

Intensive-use seating for assembly, laboratory and industrial applications. **Features:** Pneumatic height adjustment, 360° swivel with waterfall seat; Fully adjustable backrest. Sturdy 5-legged base with oversized heavy-duty plastic mushroom glides. Heavy-duty DuPont Teflon Protective Olefin Fabric. Dimensions: Seat: 18"W X 17"D X 2-3/4"T; Back: 16"W X 10"H X 2"T. Specify colors when ordering: Cloth colors: Burgundy, Medium Blue, Royal Blue, Navy, Gray, Black. Vinyl: Black, Blue. **(USA)**

TT No.	Model	Ht. Adj.	Tilt	Footring	Base	Legs	Wt. (lbs.)	PRICE
190BE5000	5000	17"-22"	N	N	5 Star Plastic	5	23	$180.00
190BE5001	5001	17"-22"	Y	N	5 Star Plastic	5	27	$235.00
190BE5200	5200	20"-25"	N	Welded Chrome	Tubular Steel	5	26	$221.00
190BE5201	5201	20"-25"	Y	Welded Chrome	Tubular Steel	5	30	$262.00
190BE5300	5300	20.5"-28"	N	18" Adj Chrome	5 Star Plastic	5	28	$231.00
190BE5301	5301	20.5"-28"	Y	18" Adj Chrome	5 Star Plastic	5	32	$269.00
190BE5500	5500	23"-33"	N	18" Adj Chrome	5 Star Plastic	5	28	$231.00
190BE5501	5501	23"-33"	Y	18" Adj Chrome	5 Star Plastic	5	32	$269.00
190BE5600	5600	25"-30"	N	Welded Chrome	Tubular Steel	5	27	$225.00
190BE5601	5601	25"-30"	Y	Welded Chrome	Tubular Steel	5	31	$265.00

5-Day Shipping Only On Select Models Call 800-832-4866 for Details

5000 Series Ergonomic Upholstered Seating Options

TT No.	Description	Wt. (lbs.)	PRICE
190BE002	Additional Lumbar Support	0.25	$6.00
190BE850	Dual Wheel Carpet Casters - 5000, 5001, 5300, 5301, 5500, 5501 Adds 1"	0.5	$6.00
190BE390	Dual Wheel Carpet Casters - 5200, 5201, 5600, 5601 Adds 2"	0.5	$6.00
190AC3850	Dual Wheel Hard Floor Casters - 5000, 5001, 5300, 5301, 5500, 5501 Adds 1"	0.5	$11.00
190BE960	Dual Wheel Hard Floor Casters - 5200, 5201, 5600, 5601 Adds 2"	0.5	$11.00
190BE005	Rubber Wheel Casters - 5200, 5201, 5600, 5601 Adds 1"	2.5	$31.00
190BE524	Ergonomic Adjustable Arms	8	$40.00
190BE035	Rubber Cushioned Metal Glides - 5200, 5201, 5600, 5601	0	$3.00
190BE103	20" Adjustable Chrome Footring - 5300, 5301, 5500, 5501	0	$9.00

4000CR Series Class 100 Cleanroom Seating

Intensive use application, meets Standard 209 for Class 100 cleanrooms. Heavy-duty construction, easy-to-use pneumatic seat height adjustment, 360° swivel, fully adjustable back with lumbar support and a sturdy 5-legged base with heavy-duty plastic mushroom glides or optional casters. Large contoured seat with resilient high-density foam, durable seamless vinyl upholstery, stainless steel staples, and an effective filtration system. There are two base styles: chrome-plated tubular steel with welded 19" diameter footring or 5 Star aluminum with brushed satin top. Specify color when ordering. Black, Blue. **(USA)**

TT No.	Model	Ht. Adj.	Tilt	Footring	Base	Wt. (lbs.)	PRICE
190BE444	4000CR	16.5"-21.5"	N	N	5 Star Aluminum	24	$256.00
190BE1004	4001CR	16.5"-21.5"	Y	N	5 Star Aluminum	26	$311.00
190BE420	4200CR	19"-24"	N	Welded Chrome	Tubular Steel	27	$287.00
190BE4201	4201CR	19"-24"	Y	Welded Chrome	Tubular Steel	29	$347.00
190BE430	4300CR	19.5"-27"	N	18" Adj Chrome	5 Star Aluminum	30	$286.00
190BE431	4301CR	19.5"-27"	Y	18" Adj Chrome	5 Star Aluminum	32	$331.00
190BE0450	4500CR	22.5"-32.5"	N	18" Adj Chrome	5 Star Aluminum	30	$286.00
190BE450	4501CR	22.5"-32.5"	Y	18" Adj Chrome	5 Star Aluminum	32	$331.00
190BE699	4600CR	24"-29"	N	Welded Chrome	Tubular Steel	28	$289.00
190BE4601	4601CR	24"-29"	Y	Welded Chrome	Tubular Steel	30	$351.00

4000CR Series Class 100 Cleanroom Seating Options

TT No.	Description	Wt. (lbs.)	PRICE
190BE171	Dual Wheel Hard Floor Casters-4000CR, 4001CR, 4300CR, 4301CR, 4500CR, 4501CR Adds 1"	0.5	$11.00
190BE960	Dual Wheel Hard Floor Casters-4200CR,4201CR,4600CR,4601CR Adds 1"	0.5	$11.00
190BE035	Rubber Cushioned Metal glides-4200CR,4201CR,4600CR,4601CR Reduces 1"	0	$3.00
190BE103	20" Adjustable Chrome Footring-4300CR,4301CR,4500CR,4501CR	1	$9.00

Color Selections For All BEVCO Models

Standard Fabrics: Burgundy, Medium Blue, Royal Blue, Navy Blue, Gray, Black

Standard & Static Control Vinyl: Royal Blue, Black

Static Control Fabric: Slate Blue, Navy Blue, Gray, Charcoal

Polyurethane: Gray, Blue, Burgundy, Yellow, Green, Black

Ideal for factory, warehouse & shop applications that require crouching or bending!

BEVCO

Maintenance Repair Stool

Convenient storage tray holds tools and parts. 15" diameter black polyurethane seat has pneumatic height adjustment (16"-21"). Sturdy five-legged steel base provides stability and safety. Lockable, 3" heavy-duty casters for easy use and smooth movement on all surfaces. Black. **(USA)**

No. 190BE305 .....$189.00

All Bevco Chairs have a 12-Year Intensive Use Guarantee and a Lifetime Guarantee on the Pneumatic Cylinder.

BEVCO®

4000 Series Economical Seating

Ergonomically designed for intensive use at an affordable price. Heavy-duty construction, easy-to-use pneumatic seat height adjustment, 360° swivel, fully adjustable back and a sturdy 5-legged base with either plastic mushroom or rubber cushion metal glides or optional casters. Large contoured seat and lumbar curved backrest comes with resilient high-density foam, provides year of long lasting comfort and support. Rugged DuPont Teflon protected Olefin fabric meets flame retardant and stain resistant standards. Specify color when ordering. Black, Gray, Burgundy, Royal Blue, Navy, Medium Blue, Beige ,Green. Vinyl: Black or Blue **(USA)**

TT No.	Model	Ht. Adj.	Tilt	Footring	Base	Glides	Wt. (lbs.)	PRICE
190BE4000	4000	16.5"-21.5"	N	N	5 Start Plastic	Plastic MG	24	$159.00
190BE4001	4001	16.5"-21.5"	Y	N	5 Star Plastic	Plastic MG	26	$215.00
190BE4200	4200	19"-24"	N	Chrome	Tubular Steel	RCMG	27	$198.00
190BE201	4201	19"-24"	Y	Chrome	Tubular Steel	RCMG	29	$245.00
190BE4334	4300	19.5"-27"	N	Adj Chrome	5 Star Plastic	Plastic MG	30	$214.00
190BE4301	4301	19.5"-27"	Y	Adj Chrome	5 Star Plastic	Plastic MG	32	$258.00
190BE4500	4500	22.5"-32.5"	N	Adj Chrome	5 Star Plastic	Plastic MG	30	$214.00
190BE4501	4501	22.5"-32.5"	Y	Adj Chrome	5 Star Plastic	Plastic MG	32	$258.00
190BE460	4600	24"-29"	N	Chrome	Tubular Steel	RCMG	28	$190.00
190BE601	4601	24"-29"	Y	Chrome	Tubular Steel	RCMG	30	$248.00

4000 Series Economical Seating Options

TT No.	Description	Wt. (lbs.)	PRICE
190BE002	Additional Lumbar Support	0.25	$6.00
190BE850	Dual Wheel Carpet Casters-4000,4001,4300,4301,4500,4501 Adds 1"	0.5	$6.00
190BE390	Dual Wheel Carpet Casters-4200,4201,4600,4601 Adds 2"	0.5	$6.00
190AC3850	Dual Wheel Hard Floor Casters-4000,4001,4300,4301,4500,4501 Adds 1"	0.5	$11.00
190BE960	Dual Wheel Hard Floor Casters-4200,4201,4600,4601 Adds 2"	0.5	$11.00

TT No.	Description	Wt. (lbs.)	PRICE
190BE7602	Plastic Mushroom Glides-4200,4201,4600,4601 Adds 1"	0.5	$7.00
190BE103	20" Adjustable Chrome Footring-4300,4301,4500,4501	1	$9.00
190BE1020	All Vinyl Upholstery - Black or Blue	0	$12.00

V8 Series ESD Chairs

Features:

- Static dissipative with a resistance of less than 10^6 and a grounding brass drag chain
- Sturdy 5-legged base
- Easy-to-use pneumatic seat height adjustment
- Ergonomic waterfall seat for comfort
- Contoured back with durable molded bumpers to prevent fabric wear
- Tilt back with adjustable tension control
- Navy blue fabric only
- ***Three-year Warranty***

VALUE-LINE by BEVCO®

TT No.	Model	Casters or Glides	Seat Height Range	18" Adj. Footring	Base Size	Wt. (lbs)	PRICE
190BE049	V800SMG	Mushroom Glides	16" - 21"	No	23"	24	$186.00
190BE050	V800SHC	Hard Floor Casters	17" - 22"	No	23"	26	$192.00
190BE051	V830SMG	Mushroom Glides	20" - 27.5"	Yes	27"	30	$238.00
190BE052	V830SHC	Hard Floor Casters	21" - 28.5"	Yes	27"	32	$244.00
190BE053	V850SMC	Mushroom Glides	23" - 33"	Yes	27"	30	$238.00
190BE054	V850SHC	Hard Floor Casters	24" - 34"	Yes	27"	32	$244.00

V7 Series Polyurethane Seating

Polyurethane seating at an affordable price. Advanced ergonomic features and controls. Includes easy operating pneumatic height control. Wide range of models meet ANSI/BIFMA X5.1 standards for quality, durability and safety. **Specs:** Seat: 18"W x 17"D soft foam polyurethane; Back: 17"W x 12"D soft foam polyurethane; Control: Back tilt, 360° swivel, pneumatic height adjustment; Base: Black, reinforced plastic; Some assembly required.

TT No.	Casters or Glides	Seat Height Range	18" Adj. Footring	Base Size	PRICE
190BE0507	Hard Floor Casters	23" – 33"	Yes	27"	$173.00
190BE0750	Carpet Casters	23" – 33"	Yes	27"	$164.00
190BE507	Mushroom Glides	22" – 32"	Yes	27"	$164.00
190BE770	Hard Floor Casters	18" – 23"	No	23"	$148.00
190BE070	Carpet Casters	18" – 23"	No	23"	$141.00
190BE0007	Mushroom Glides	17" – 22"	No	23"	$141.00

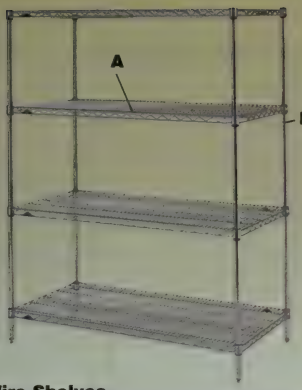
V4 Series Upholstered Seating

Economical heavy duty seating for production line or assembly applications. Fully adjustable, easy operating pneumatic height control. **Specs:** Seat: 18"W x 18"D with rubber fabric protector; Back: 16"W x 15"D with rubber fabric protector; Control: Back tilt, 360° swivel, pneumatic height adjustment; Base: Black, reinforced plastic; Fabric Colors: Black, Blue, Gray, Burgundy. Some assembly required.

TT No.	Casters or Glides	Seat Height Range	18" Adj. Footring	Base Size	PRICE
190BE0547	Hard Floor Casters	24" – 34"	Yes	27"	$143.00
190BE7504	Carpet Casters	24" – 34"	Yes	27"	$135.00
190BE4507	Mushroom Glides	23" – 33"	Yes	27"	$135.00
190BE740	Hard Floor Casters	17" – 22"	No	23"	$125.00
190BE407	Carpet Casters	17" – 22"	No	23"	$116.00
190BE4007	Mushroom Glides	16" – 21"	No	23"	$116.00
190AC0190	Height Adjustable Arms	–	–	–	$40.00

Super Erecta® Shelving Systems

Adjustable shelves can be easily repositioned at precise 1" increments along the length of the numbered posts. Uniquely designed shelves of open wire allow air circulation, minimize dust and allow greater visibility of stored items. A full choice of caster types are available for mobile applications.



A. Super Erecta® Chrome Plated Wire Shelves

Shelf Length	18"W		21"W		24"W	
	TT No.	PRICE	TT No.	PRICE	TT No.	PRICE
24"	474BE824	$58.00	474IE016	$68.50	474BE346	$72.00
30"	474BE340	$59.50	474IE017	$70.50	474BE347	$75.50
36"	474AC183	$61.00	474IE006	$73.50	474BE348	$78.00
42"	474BE342	$74.50	474IE019	$84.50	474BE349	$92.50
48"	474BE601	$74.50	474BE2148	$84.50	474BE350	$92.50
54"	474BE343	$86.50	474IE021	$99.50	474BE354	$109.50
60"	474BE344	$79.00	474IE022	$99.50	474BE355	$109.50
72"	474BE345	$104.50	474IE2172	$119.00	474BE356	$130.50

Adjust shelves in 1" increments in seconds!

C. Super Adjustable Super Erecta® Chrome Plated Wire Shelves with Levers

Shelf Length	18"W		21"W		24"W	
	TT No.	PRICE	TT No.	PRICE	TT No.	PRICE
24"	474BE785	$63.00	474IE023	$73.50	474BE242	$77.00
30"	474AC830	$64.50	474AC130	$75.50	474AC430	$80.50
36"	474AC836	$66.00	474AC136	$78.50	474AC435	$83.00
42"	474AC842	$79.50	474AC142	$89.50	474AC442	$97.50
48"	474AC848	$79.50	474AC148	$89.50	474AC447	$97.50
54"	474AC854	$91.50	474AC154	$104.50	474AC454	$114.50
60"	474AC860	$91.50	474AC161	$104.50	474AC459	$114.50
72"	474AC872	$109.50	474AC172	$124.00	474AC471	$135.50

E. Stem Casters

Turn your Super Erecta® shelving unit into a mobile shelving unit or cart.

TT No.	Metro No.	Dia.	Shelf Width	Type	Wheel Tread	PRICE/Ea.
474IE401	4LD	4"	--	Swivel	Resilient	$22.50
474IE402	5LD	5"	--	Swivel		$26.00
474IE403	5M	5"	--	Swivel		$30.00
474IE404	5MB	5"	--	Brake		$36.00
474IE148*	5MR-18RS	5"	18"	Rigid		$36.00
474IE149*	5MR-21RS	5"	21"	Rigid		$36.00
474IE150*	5MR-24RS	5"	24"	Rigid		$36.00
474IE0005	5MDA	5"	--	Swivel	High Modulus Donut	$30.00
474IE500	5MDBA	5"	--	Brake		$36.00
474IE123*	5MDRA-18RS	5"	18"	Rigid		$36.00
474IE124*	5MDRA-21RS	5"	21"	Rigid		$36.00
474IE125*	5MDRA-24RS	5"	24"	Rigid		$36.00
474IE500	5MP	5"	--	Swivel	Polyurethane	$36.00
474IE0505	5MPB	5"	--	Brake		$36.00
474IE0550*	5MPR-18RS	5"	18"	Rigid		$53.00
474IE0551*	5MPR-21RS	5"	21"	Rigid		$53.00
474IE0552*	5MPR-24RS	5"	24"	Rigid		$53.00
474IE5656	6MP	6"	--	Swivel		$62.50
474IE5566	6MPB	6"	--	Brake		$74.00
474IE226*	6MPR-18RS	6"	18"	Rigid		$74.00
474IE227*	6MRR-21RS	6"	21"	Rigid		$74.00
474IE228*	6MPR-24RS	6"	24"	Rigid		$74.00

** Must purchase in lots of 2*

B./D./F. Chrome Plated SiteSelect™ Posts & Handles

SiteSelect Posts are fitted with adjustable leveling bolts to compensate for uneven surfaces, and fit both Super Erecta® and Super Adjustable Super Erecta® Shelves. Posts are grooved at 1" increments, numbered at 2" increments, and double grooved every 8" for easy spacing identification.
*Height includes leveling bolt and cap.

TT No.	Metro No.	Height	Description	PRICE
B. 474AC007	7P*	7-1/2"	Post w/Adjustable Leveling Bolts	$11.00
474AC003	13P*	14-1/2"	Post w/Adjustable Leveling Bolts	$14.00
474AC027	27P*	27-1/2"	Post w/Adjustable Leveling Bolts	$17.00
474AC033	33P*	34-1/2"	Post w/Adjustable Leveling Bolts	$18.00
474AC053	54P*	54-9/16"	Post w/Adjustable Leveling Bolts	$21.00
474AC062	63P*	62-9/16"	Post w/Adjustable Leveling Bolts	$22.50
474BE074	74P*	74-5/8"	Post w/Adjustable Leveling Bolts	$24.50
474AC086	86P*	86-5/8"	Post w/Adjustable Leveling Bolts	$30.50
474ST961	96P*	96-5/8"	Post w/Adjustable Leveling Bolts	$35.00
D. 474BE027	27UP	27-1/2"	Post for use with Stem Casters	$17.00
474CA033	33UP	33-7/8"	Post for use with Stem Casters	$18.00
474CA054	54UP	54"	Post for use with Stem Casters	$21.00
474AC663	63UP	62"	Post for use with Stem Casters	$22.50
474AC071	74UP	74"	Post for use with Stem Casters	$24.50
474BE167	86UP	86"	Post for use with Stem Casters	$30.50
F. 474IE024	H3C**	34"	18" Wide One-Piece Cart Handle	$40.00
474ST444	H4C**	34"	21" Wide One-Piece Cart Handle	$41.00
474PR789	H5C**	34"	24" Wide One-Piece Cart Handle	$41.00

***For use with Super Erecta® Shelves and Accessories Only.*

Shelving Accessories

TT No.	Metro No.	Pkg Qty	Description	PRICE
474AC886	9986Z	4/bg	Aluminum Split Sleeves w/Zinc Rings	$8.70
474BE351	9985-ESD	4/bg	Super Erecta® Conductive Plastic Split Sleeves	$8.70
474IE027	9985	4/bg	Super Erecta® Plastic Split Sleeves - Black	$6.70
474IE028	A9985A2	4/bg	Replacement Wedges and Sleeves for Super Adjustable Super Erecta	$6.00
474IE030	AESDA2-KIT	4/bg	Super Adjustable Super Erecta® ESD Kit (Releases, Wedges, Sleeves)	$29.00
474IE031	AESDA2-4	4/bg	Super Adjustable Super Erecta® Conductive Sleeves	$6.50
474IE032	9994Z	1	Zinc Post Clamps - Joins units together	$6.00
474BE993	9993Z	1	Zinc Foot Plates	$11.50
474IE034	9991P	1	Leveling Bolt Polymer Floor Glide	$3.30
474IE035	ASKCR	1	Screw On ESD Grounding Cable	$23.00
474AC166	ASK16S	1	Clamp On ESD Grounding Cable	$22.50

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.
We reserve the right to correct misprints.

Techni-Tool® Modular Wire Shelving

Meet any storage requirement - and save money - with our multi-use, easy-to-configure shelving system. Posts are numbered in 1" increments to make adjusting shelves easy, and come with leveling bolts. For a mobile system, add stem casters with 5" non-marking, easy-roll, shock absorbing poly wheels. For cart applications, donut bumpers provide additional shock absorption and there is a 30" U-handle assembly for 18", 21" and 24" wide shelves.

A. Chrome Plated Wire Shelves

Shelf Length	18"W		21"W		24"W	
	TT No.	PRICE	TT No.	PRICE	TT No.	PRICE
24"	758IE670	$20.96	758IE678	$23.10	758IE686	$26.87
30"	758IE671	$22.57	758IE679	$25.79	758IE687	$29.01
36"	758IE672	$24.18	758IE680	$28.48	758IE688	$30.63
42"	758IE673	$27.94	758IE681	$31.70	758IE689	$35.94
48"	758IE674	$31.16	758IE682	$33.85	758IE690	$37.07
54"	758IE675	$35.46	758IE683	$38.69	758IE691	$42.45
60"	758IE676	$36.54	758IE684	$41.37	758IE692	$46.21
72"	758IE677	$42.45	758IE685	$47.82	758IE693	$54.27

Posts and Handles *(Height includes leveling bolt and cap)*

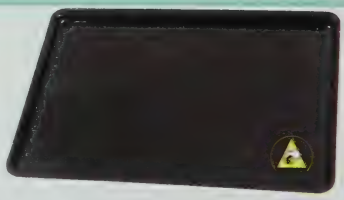
	Height	Description	TT No.	PRICE
B	14"	Post with adjustable leveling bolt	758IE694	$4.30
B	27"	Post with adjustable leveling bolt	758IE695	$11.15
B	34"	Post with adjustable leveling bolt	758IE696	$5.93
B	54"	Post with adjustable leveling bolt	758IE697	$8.51
B	63"	Post with adjustable leveling bolt	758IE698	$8.91
B	74"	Post with adjustable leveling bolt	758IE699	$10.13
B	86"	Post with adjustable leveling bolt	758IE700	$12.21
C	34"	18" wide U-handle assembly (cart requires 2)	758IE702	$29.00
C	34"	21" wide U-handle assembly (cart requires 2)	758IE703	$30.40
C	34"	24" wide U-handle assembly (cart requires 2)	758IE707	$31.50

Stem Casters, Donut Bumper, Split Sleeves

	Description	Shelf Width	Dia.	TT No.	PRICE
D	Poly Swivel Caster-each	-	5"	758IE765	$22.50
E	Poly Swivel Caster with Brake-each	-	5"	758IE766	$28.00
	Poly 2 Swivel/2 Brake Stem Casters, Set of 4	-	5"	758IE714	$54.50
	Poly 2 Swivel/2 Rigid Stem Casters, Set of 4	18"	5"	758IE7151	$97.80
	Poly 2 Swivel/2 Rigid Stem Casters, Set of 4	21"	5"	758IE7152	$97.80
	Poly 2 Swivel/2Rigid Stem Casters, Set of 4	24"	5"	758IE7153	$97.80
	Poly 2 Brake/2 Rigid Stem Casters, Set of 4	18"	5"	758IE7161	$103.75
	Poly 2 Brake/2 Rigid Stem Casters, Set of 4	21"	5"	758IE7162	$103.75
	Poly 2 Brake/2 Rigid Stem Casters, Set of 4	24"	5"	758IE7163	$103.75
	ESD 2 Swivel/2Brake Stem Casters, Set of 4	-	5"	758ST7170	$211.97
F	3" Donut Bumper	-	3"	758IE711	$4.70
G	Plastic Split Sleeves, 4/Bag	-	-	758IE712	$2.80
	ESD Split sleeves, 4/Bag	-	-	758IE767	$10.57
	ESD Clamp-On Drag Chain	-	-	758IE720	$13.29
	S-Hook	-	-	758IE721	$5.80

Trays

ESD Assembly Trays

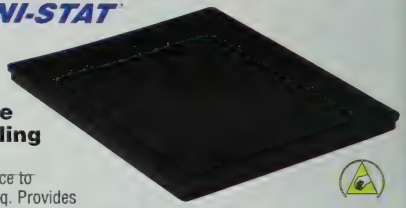


ESD trays provide effective protection for handling PC boards and electronic components in assembly, packaging, storage and processing areas. Made of reinforced thermoset composite material, these trays offer permanent ESD protection without requiring surface treatment. The products withstand static loads > 200lbs., and temperature ranges of -40°F to 250°F. **Specs:** SMC Resistance: <10^5Ω/sq.; Wet Mix Resistance: 1 x 10^5 to 1 x10^7Ω/sq.; Color: Black. **(USA)**

18" x 14" x 1" (SMC)
No. 578PR318 .....**$29.63**
25-3/4" x 17-7/8" x 1-1/8" (SMC)
No. 578PR000 .....**$42.62**

27" x 20" x 1" (Wet Mix)
No. 578PR217 .....**$81.65**

TECHNI-STAT



Conductive PCB Handling Trays

Excellent resistance to abrasion <10^6Ω/sq. Provides effective ESD protection for handling static sensitive products and equipment.

12.5" x 9" x 1.6"
No. 758ST0850 .....**$17.51**
14.5" x 11.5" x .50"
No. 758ST0851 .....**$17.51**

14.5" x 9.84" x 2.5"
No. 758ST0852 .....**$14.65**
17.7" x 11.4" x 2.3"
No. 758ST0854 .....**$20.50**

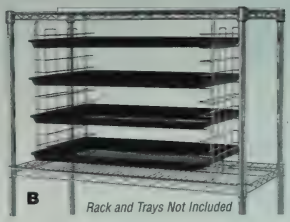
TECHNI-TOOL

Wire Shelving Systems

New!

TT No.	Description		PRICE
A 758IE725	18" X 36" slanted shelf	For high visibility, gravity feed and stock rotation. Shelf fits stationary and mobile units. Chrome finish.	$37.91
758IE726	18" x 48" slanted shelf		$50.57
758IE727	24" x 36" slanted shelf		$49.06
758IE728	24" x 48" slanted shelf		$60.30
B 758IE729	18" tray slide	Efficiently utilize space between shelves.	$41.07
758IE730	24" tray slide		$43.62
C 758IE731	18" x 30" x 39" tray cart	Chrome finish, holds 39 trays	$201.01
758IE732	18" x 30" x 69" tray cart	Chrome finish, holds 69 trays	$272.12
758IE733	32" tray stop	Use with tray cart to service trays when moving.	$24.09
758IE734	62" tray stop		$32.90
D 758IE735	18" x 26" tray, white	Heavy-duty tray with reinforced ends.	$24.95
E 758IE736	18" x 26" ESD tray, black		$28.64
F 758IE737	Bin cart w/7 22-1/2" x 17-1/2" x 6" dividable grid bins	21" x 24" x 69" modular cart. Adj. positions on 1" centers let you use bins or trays. Chrome. Choose Red, Blue & Gray bins.	$444.95
758IE738	Bin cart w/11 22-1/2" x 17-1/2" x 3" dividable grid bins		$430.74
G 758IE739	36" bin rail holder	Adjusts in 1" increments	$20.14
758IE740	48" bin rail holder		$23.36
758IE741	60" bin rail holder		$24.28
758IE742	Pneumatic stem/swivel caster	8" x 2-1/2", 325 lbs. load cap.	$44.73/ea.
H 758IE744	24" x 36" x 69" ESD security cart	Stem castered ESD security unit locks, allows view of contents. Moveable on casters. Chrome.	$1,382.34
758IE745	24" x 48" x 69" ESD security cart		$1,547.25
758IE746	24" x 60" x 69" ESD security cart		$1,700.55
758IE747	18" x 36" x 63" ESD cart cover	Wire cart covers protect against pilferage, airborne dust, waste and other contaminants. Blue Vinyl with zippered flap.	$324.00
758IE748	18" x 48" x 63" ESD cart cover		$357.25
758IE749	18" x 60" x 63" ESD cart cover		$390.45
758IE751	18" x 72" x 63" ESD cart cover		$423.70
758IE752	24" x 36" x 63" ESD cart cover		$340.65
758IE753	24" x 48" x 63" ESD cart cover		$373.90
758IE754	24" x 60" x 63" ESD cart cover		$407.10
758IE755	24" x 72" x 63" ESD cart cover		$440.35
758IE756	18" x 36" x 74" ESD cart cover		$354.40
758IE757	18" x 48" x 74" ESD cart cover		$387.70
758IE758	18" x 60" x 74" ESD cart cover		$420.95
758IE759	18" x 72" x 74" ESD cart cover		$454.20
758IE760	24" x 36" x 74" ESD cart cover		$371.10
758IE761	24" x 48" x 74" ESD cart cover		$404.35
758IE762	24" x 60" x 74" ESD cart cover		$437.55
758IE763	24" x 72" x 74" ESD cart cover		$470.80

Bins Not Included



Rack and Trays Not Included

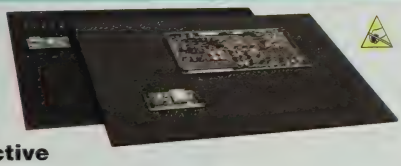
Trays Not Included

Bins Not Included

Cart and Contents Not Included

Bins Not Included

Trays



Conductive Containers, Inc. Conductive Process Trays

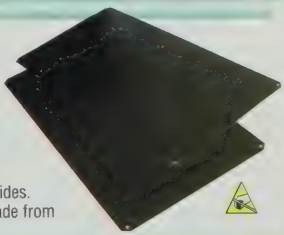
These trays are available in double-wall Corstat™ or in Thermoformed conductive plastic. The Corstat™ version is a durable double-wall tray with cross-link foam that is locked in place during use. The CP version is a plastic tray with conductive reversible crosslink loose foam. Trays are used for assembly, transport and storage of sensitive PC boards and devices in process. **(USA)**

18" x 12" Corstat™ Tray w/ 1/4" Conductive Crosslink foam attached
No. 265ST1310 .....**$17.54**

Shelf Liners

Corstat™ Shelf Liners

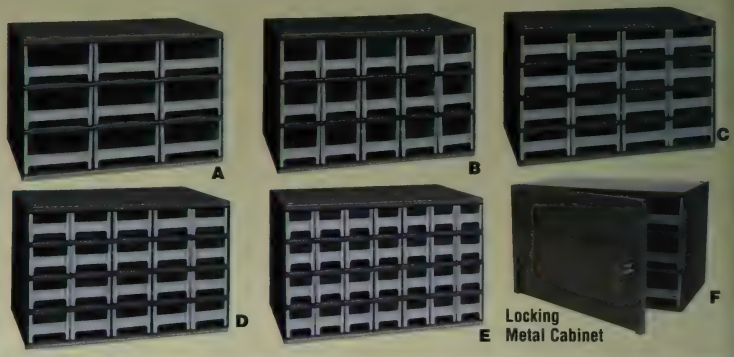
The corners are angled to fit standard shelving sizes. Corstat™ liners are equipped with two snaps to fit wrist straps and ground cords. Corstat™ liners are made of rigid .080 chipboard that is conductive on both sides. Conductive Fluted Plastic (CFP) are made from 4mm extruded conductive plastic.



TT No.	Type	L x W x H	PRICE
265ST1836	Corstat™	17-1/2" x 35-1/2" x .080"	$23.33
265ST347	Corstat™	23-1/2" x 47-1/2" x .080"	$11.78
265ST2347	CFP	23-1/2" x 47-1/2" x 3/16"	$23.33

AKRO-MILS® Series 1900 Storage Cabinets

Buy as separate drawer units or combine with the Storage-Go-Round carousel base. Add-and-stack design allows you to add additional storage cabinets as needed. Size 17"L x 11"W x 11"D. The cabinet units are made of heavy-duty, chip-proof, baked-enamel welded steel. The drawers are high-impact polystyrene with a large label slot. **(USA)**



	Cabinet No.	No. of Drawers	PRICE Each	Divider No.	PRICE 25/Pk.	Drawer No.	PRICE
A	128ST284	9	$134.10	128ST318	$18.62	128ST306	$10.22
B	128ST282	15	$134.10	128ST316	$14.68	128ST304	$8.28
C	128ST280	16	$134.10	128ST314	$13.37	128ST302	$5.89
D	128ST287	20	$134.10	128ST312	$14.61	128ST300	$4.96
E	128ST276	28	$134.10	128ST310	$15.46	128ST308	$4.51
F	128ST109	9	$181.20	128ST222	$10.01	128ST306	$10.22

Holds up to 20 Series 1900 cabinets!

Turntable Base

Akro-Mils1900 Storage-Go-Round System

Adding this unique rotating system requires less than one square yard of floor space. The complete Storage-Go-Round consists of the 128ST320 turntable base with inset base, threaded rod, steel upright, metal cap, nutcap, washer and wood-stabilizing plate. This system holds up to twenty *Series 1900* cabinets (shown on right) in any combination of your choice. *(Cabinets sold separately.)* 31"W x 31"D x 60"H. **(USA)**

Base Only
No. 128ST320.....**$821.00**

Compact Economy Cabinets

Organize and protect your small to medium sized components or parts in these welded steel frame storage units. Frosted styrene drawers can be partitioned with dividers. 18"W x 9-1/2"H x 6"D. **(USA)**

G 128ST034 **H 128ST036**

Cabinet No.		No. of Drawers	PRICE/Each	Divider No.	PRICE 25/Pk.	Drawer No.	PRICE
128ST034	G	18	$90.30	128ST222	$10.01	128ST064	$2.29
128ST036	H	36	$90.30	128ST220	$9.74	128ST062	$1.27

Flambeau Products Containers

Contents Not Included

Large Compartmented Cases

Molded from copolymer resins that resist common solvents and odors, these small parts boxes will not rust or dent. Brass hinge pins for optimum strength and durability. Identification card enables quick case selection. Translucent lid for quick identification of contents. 18-1/2" x 13" x 3". **(USA)**

Choose adjustable or fixed compartments:

No. 379IE1016 4 to 16 (adj.) **$28.19**
No. 379IE1021 21 (fixed) **$28.19**
No. 379CA024 24 (fixed) **$28.35**
No. 379IE1032 8 to 32 (adj.) **$28.41**

Infinite Divider System™

Cabinet includes five trays for holding divider boxes. Made from rust-proof polypropylene that will not dent, and has a textured finish that resists scratches. Stackable cabinets interlock top-to-bottom and side-to-side. Divider boxes can be used alone or with the cabinet, and can be adjusted using dividers in 1/8" increments. Boxes are made of durable chemical and solvent resistant polypropylene and are ideal for organizing a variety of small parts. Cabinet dimensions: O.D. 14.5"H x 15.5"D x 15.8"L; Tray size: 13-9/16"L x 9-1/2"D x 2-3/16"H.

Cabinet with five drawers with handles
No. 379ST8501.....**$127.56**

Cabinet with five drawers without handles
No. 379ST850 .....**$108.84**

Includes 5 infinite divider boxes!

379ST8501
379ST850

Boxes

TT No.	O.D. Dimensions	Description	PRICE
379ST033	6-5/8" x 3-3/8" x 1-1/4"	Includes 6 dividers; does not fit in cabinet	$3.93
379ST600	11" x 6-3/4" x 1-3/4"	Includes 6 dividers; does not fit in cabinet	$7.28

Contents Not Included

QUANTUM™ STORAGE SYSTEMS

Ultra Stack and Hang Bins

Organize your inventory with color-coded bins. Strong, injection molded with front, back and side grips for easy handling. Built-in rear hanger for hanging on louvered panel. Wide stacking ledge and anti-slide lock keep stacked bins steady. Large molded slots for ID labels. Interchangeable with other manufacturer's bins.

Jumbo 24" Deep Ultra Bins

TT No.	Outside Dimensions L	W	H	PRICE
672IE950*	23-7/8"	8/14"	7"	$20.40
672IE951*	23-7/8"	8/14"	9"	$21.85
672IE952*	23-7/8"	11"	7"	$22.73
672IE953*	23-7/8"	11"	10"	$25.80
672IE954*	23-7/8"	16-1/2"	11"	$28.02
672IE955*	23-7/8"	16-1/2"	12"	$29.78

To specify color, add the following to the product number: B = Blue, Y = Yellow, R = Red.

TT No.	Outside Dimensions L	W	H	PRICE
672IE205*	4-1/2"	4-1/8"	3"	$0.87
672IE210*	5-1/2"	4-1/8"	3"	$0.89
672IE220*	7-1/2"	4-1/8"	3"	$1.52
672IE224*	10-7/8"	4-1/8"	4"	$2.19
672IE230*	10-7/8"	5-1/2"	5"	$3.76
672IE233*	13-1/2"	5-1/2"	5"	$4.63
672IE234*	14-3/4"	5-1/2"	5"	$6.54
672IE235*	11"	11"	5"	$5.86
672IE239*	11"	8-1/4"	7"	$16.66
672IE240*	14-3/4"	8-1/4"	7"	$7.55
672IE245*	11"	16-1/2"	5"	$8.82
672IE250*	14-3/4"	16-1/2"	7"	$10.74
672IE255*	16"	11"	8"	$11.21
672IE260*	18"	11"	10"	$15.84
672IE265*	18"	8-1/4"	9"	$12.20
672IE270*	18"	16-1/2"	11"	$18.96
672IE280*	19-3/4"	12-3/8"	5-7/8"	$11.55

To specify color, add the following to the product number: B = Blue, Y = Yellow, R = Red and G = Green.

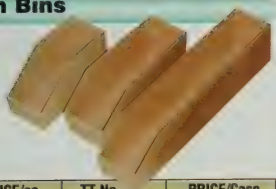
QUANTUM™ STORAGE SYSTEMS

Heavy Duty Attached Top Containers

Strong, reliable and reusable totes. Tops are permanently attached with interlocking steel hinges for stacking strength and security. Stack for maximum storage, nest when empty. Textured, non-slip bottom ensures smooth conveying. Integral handles. Grey.

TT No.	Outside Dimensions	PRICE
672IE20127	20" x 11-1/2" x 7-1/2"	$14.56
672IE21159	21-1/2" x 15-1/4" x 9-5/8"	$15.14
672IE211512	21-1/2" x 15-1/4" x 12-3/4"	$17.24
672IE211517	21-1/2" x 15-1/4" x 17-1/4"	$20.41
672IE221312	22-1/8" x 12-13/16" x 11-7/8"	$19.16
672IE242012	24" x 20" x 12-1/2"	$26.60
672IE271712	27" x 17-3/4" x 12-1/2"	$23.60
672IE251514	24" x 15" x 13-3/4"	$25.31
672IE281813	27-5/8" x 18-3/8" x 13-1/2"	$47.65
672IE282015	28" x 20-5/8" x 15-5/8"	$48.14

Organization Bins



Kraft Open Bins

Open style, non-ESD bin is ideal for storage and organization of parts, tools and components. Economical and sturdy Kraft construction. Available individually or by in cases of 25.

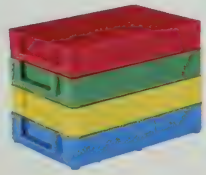
Dimensions	TT No.	PRICE/ea.	TT No.	PRICE/Case
12" x 2" x 4-1/2"	265IE0950	$3.25	265IE0951	$15.00
12" x 4" x 4-3/8"	265IE1001	$0.70	265IE1002	$15.73
12" x 6" x 4-1/2"	265IE1003	$0.78	265IE1004	$17.43
12" x 8" x 4-1/4"	265IE1010	$0.84	265IE1011	$18.70
12" x 12" x 4-1/2"	265IE1020	$1.05	265IE1021	$23.38
18" x 4" x 4-1/2"	265IE1052	$0.72	265IE152	$16.15
18" x 6" x 4-1/2"	265IE1053	$0.76	265IE153	$21.00
18" x 8" x 4-1/2"	265IE1054	$1.05	265IE154	$23.38
18" x 12" x 4-1/2"	265IE1062	$1.39	265IE162	$31.03
24-1/2" x 4-1/4" x 4-5/8"	265IE1105	$0.89	265IE115	$19.98
24-3/4" x 6" x 4"	265IE1125	$1.27	265IE125	$28.48
24-3/4 x 8-1/4" x 4-5/8"	265IE1144	$1.18	265IE144	$26.35

GROBET USA

High-Impact Job Trays

Simple, uniform method for organizing work by color. Large trays are self-nesting with a label holder at each end. 9"L x 6"W x 1-1/2"H (I.D.).

TT No.	Color	PRICE
846ST014	Red	$2.80
846ST016	Yellow	$2.80
846ST018	Green	$2.80
846ST020	Blue	$2.80



QUANTUM™ STORAGE SYSTEMS

Cross Stack Tub

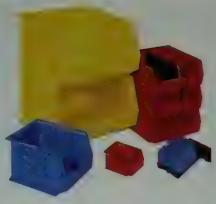
USDA/FDA-approved tote nests when empty or can be turned 90° to cross stack. High impact polypropylene won't crack, rust or corrode. Easy to clean. Built-in handles and bottom grooves make handling easy. Hold up to 100 lbs. Six 1/4" holes in the bottom allow for drainage. Lids keep items dust free.

Tubs TT No.	Tubs Outside Dimensions	Tubs PRICE	Lids TT No.	Lids PRICE
672IE17118*	17-1/4" x 11" x 8"	$5.53	672IE1711*	$5.17
672IE171112*	17-1/4" x 11" x 12"	$8.33	672IE1711*	$5.17
672IE24178*	23-3/4" x 17-1/4" x 8"	$11.49	672IE2417*	$7.91
672IE241712*	23-3/4" x 17-1/4" x 12"	$13.22	672IE2417*	$7.91
672IE25168**	25-1/8" x 16" x 8-1/2"	$296.82	672IE2516**	$7.77
672IE25168	Cross Stack Tub Rack, Chrome, 27" x 19" x 41", Includes 3 tubs.	$296.82	—	—
QuanTub Nesting Totes – 24-1/2" x 19" x 9-1/2" . Holds 100 lbs. Six 1/4" drain holes. Totes nest when empty and prevent jamming with rib top.				
672IE24199**	24-1/2" x 19" x 9-1/2"	$16.68	—	—

*To specify color, add the following to the product number: GY = Grey, BU = Blue, WH = White ** Only available in Grey or Blue*

AKRO-MILS

Akrobins Plastic Storage Bins



Can be suspended from most straight rails. Extra-wide stacking ledge for stacking. Anti-slide stop keeps loaded bins stable. Large label card slot for easy labeling. Reinforcing ribs prevent bins from spreading. No cumbersome anti-spread bar required even on largest model. Finger grips for easy handling of larger bins. **(USA)**

TT No.	Color	Outside Dimensions L	W	H	Qty	PRICE
128ST098	Red				Each	$1.72
128ST100	Yellow	5-3/8"	4-1/8"	3"	Each	$1.72
128ST102	Blue				Each	$1.72
128ST106	Red				Each	$3.34
128ST108	Yellow	7-3/8"	4-1/8"	3"	Each	$3.34
128ST110	Blue				Each	$3.34
128ST114	Red				Each	$7.97
128ST116	Yellow	10-7/8"	5-1/2"	5"	Each	$7.97
128ST118	Blue				Each	$7.97
128ST354	Yellow				Each	$12.29
128ST356	Blue	10-7/8"	11"	5"	Each	$12.29
128ST392	Red				Each	$13.26
128ST394	Yellow	10-3/4"	8-1/4"	7"	Each	$13.26
128ST396	Blue				Each	$13.26
128ST122	Red				Each	$15.73
128ST126	Blue	14-3/4"	8-1/4"	7"	Each	$15.73
128ST128	Red				Each	$22.06
128ST130	Yellow	14-3/4"	16-1/2"	7"	Each	$22.06
128ST132	Blue				Each	$22.06

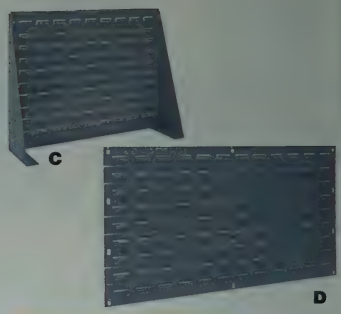
Rolling Or Stationary!

Akrobins Panel Rack

Snap fastener louvered rack accepts seven different size bins (up to 192 bins) Rack sits stationary on the floor; convert to a rolling rack by an optional set of wheels. (Optional wheels add 5.5" to height.) *Bins not included.* 36"L x 20"W x 60"H.

A. Rack
No. 128ST626 .....$549.89

B. Optional wheels
No. 128ST424 .....$129.69



Heavy-Duty 120 lb. Capacity

Akrobins Bench Rack

Welded steel, grey baked-enamel finish. Sturdy frame with side supports shipped assembled. No nuts or bolts required; Heavy-duty 120 lb. capacity. (*Bins not included*). **(USA)**

27-3/4"L x 8"W x 21"D
C. No. 128ST250 .....$72.74

36"L x 8"W x 21"D
C. No. 128ST523 .....$88.64

35-3/4"L x 19"H
D. No. 128ST156 .....$49.03

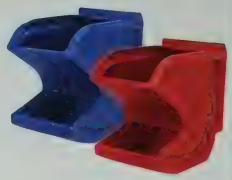
18"L x 19"H
D. No. 128ST618 .....$36.35

AKRO-MILS

New!

Gravity Hopper System

Complete system for any picking, sorting or assembly operation. Easily assembled rack holds 6 large gravity hoppers on each side with 75 lbs load capacity each. Rack: 13 gauge steel; 900 lb load capacity. Adjustable rail heights. Hoppers are rotational molding for strength and durability, and can be used freestanding or combined with rack.



Rack Dim: 36"L x 36"W x 69"H
No. 128ST623 .....$465.87

Hoppers Dim: 18"L x 11"W x 19.5"H
No. 128ST624 Blue.....$82.85 **No. 128ST625** Red $82.85

QUANTUM™ STORAGE SYSTEMS

Tool Caddy

Industrial strength, hand-held caddy with deep compartments for tools and supplies. High density polypropylene. 18.25"L x 13.75"W x 8.75"H

No. 672IE500GY Gray $5.91
No. 672IE500BU Blue $5.91

TEC-TUFF Compartment Boxes

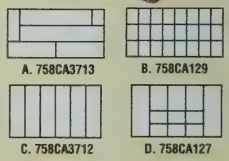
Clear Parts Boxes

- Clear for easy identification of parts.
- Made with transparent cellulose propylinate.
- Extremely tough and sturdy.
- Metal rustproof hinges for added strength.
- Resistant to oil, most common chemicals and solvents.
- Excellent for tool kits, industrial packaging, or storage. **(USA)**

Quantity Discounts Available

Large - O.D.: 12-1/4"L x 6-1/8"W x 1-1/2"D
I.D.: 11-7/8"L x 5-7/8"W x 1-7/16"D
A. No. 758CA3713 6 Compartments.....$15.67
B. No. 758CA129 24 Compartments.....$15.56
Medium - O.D.: 7-1/4"L x 4-1/2"W x 1-1/4"D
I.D.: 7"L x 4"W x 1-1/16"D
C. No. 758CA3712 6 Compartments.....$8.43
D. No. 758CA127 11 Compartments $13.24
E. No. 758CA084* 18 Compartments $5.60

**758CA084 has O.D. of 8"L x 4-1/8"W x 1-13/16"D*

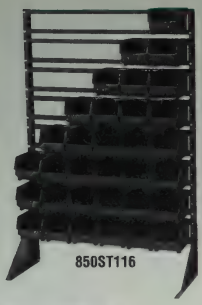


LEWIS BINS+ ESD-Safe Metal Storage Systems

Conductive metal louvered panels, and rail stands are used to hang conductive parts bins making a complete ESD storage system. Panels are punched from 16 gauge steel and finished in a durable black permanently conductive coating. Louvered panels mount securely to walls or bench tops. (160 lb capacity) Stationary racks can be fastened securely to the floor for additional safety. Two-sided racks easily convert to a mobile unit with the addition of the mobile kit.

850ST1818

850ST183


850ST116

ESD-Safe Wall Mounted Louvered Panels

TT No.	Dimensions (in) H	L	PRICE
850ST1818	18	18	$29.80
850ST1236	12	36	$40.69
850ST1836	18	36	$50.20

ESD-Safe Bench Panel

TT No.	Dimensions (in) H	L	PRICE
850ST181	18	18	$50.95
850ST123	12	36	$60.75
850ST183	18	3	$73.60

ESD-Safe Rail Floor Stands

TT No.	Description	Dimensions (in) H	L	PRICE
850ST112	1 sided/12 rails	54	36	$212.90
850ST116	1 sided/16 rails	54	36	$242.04
850ST212	2 sided/12 rails	54	36	$216.80
850ST216	2 sided/16 rails	54	36	$248.00

ESD-Safe Louvered Panel Floor Stands

TT No.	Description	Dimensions (in) H	L	PRICE
850ST001	1 sided/288 slots	54	36	$312.66
850ST002	2 sided/576 slots	54	36	$490.65

850ST002
Shown with Mobile Kit

Mobile Kit - 4" casters, braces, handles and drag chain. *For Models 850ST212, 850ST216 and 850ST002.*
No. 850ST4000.....**$96.25**

ESD-Safe Plastibox® Parts Bins

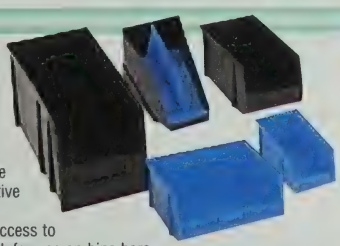
Organize your work area to efficiently store components, assemblies and circuit boards while protecting them from the damaging effects of static electricity. Label insert area for easy identification. Solid covers further protect parts by creating a Faraday Cage. **Specs:** Resistance: <1.0 x $10^4\Omega$/sq.; Resistivity: <1.0 x $10^6\Omega$/sq.; Static Decay: <2 seconds.

TT No.	Outside Dimensions (in) L	W	H	PRICE	Cover	PRICE
850ST010	3.5	4.0	2.0	$3.55	–	–
850ST011*	3.5	4.0	2.0	$3.60	–	–
850ST020	7.0	4.0	2.9	$3.25	850ST200	$2.80
850ST021*	7.0	4.0	2.9	$6.00	850ST200	$2.80
850ST022	6.6	8.8	2.9	$8.90	–	–
850ST023*	6.6	8.8	2.9	$10.15	–	–
850ST030	9.5	5.8	5.0	$7.00	850ST300	$3.25
850ST031*	9.5	5.8	5.0	$12.90	850ST300	$3.25
850ST032	9.3	8.8	5.0	$16.00	–	–
850ST033*	9.3	8.8	5.0	$18.00	–	–
850ST040	12.8	8.1	6.0	$18.05	–	–
850ST041	12.8	11.4	6.0	$21.90	–	–
850ST042*	12.8	11.4	6.0	$23.35	–	–

** With Molded-In Divider*

Bins

METRO



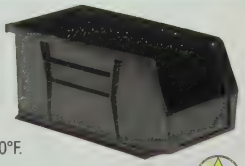
Stacking Bins

Stacking bins are injection molded from polypropylene-base resins in static dissipative blue Benstat or black, conductive Bentron compounds. All sizes have a hopper front for easy access to contents and a slot on the back for use on bins bars. *(Outside Dimensions shown)* **(USA)** ***Other sizes available - call.***

Bentron Black Conductive	PRICE	Benstat Blue Dissipative	PRICE	L"	W"	H"
474PR055	$17.00	474ST1055	$17.00	10.88"	5.5"	5"
474ST1587	$37.50	474ST587	$37.50	14.75"	8.25"	7"
474ST1516	$31.50	474ST516	$31.50	14.75"	16.5"	7"

AKRO-MILS

Conductive Part Bins



Static dissipative qualities won't wear or wash away on these conductive parts bins. The protection is molded-in for a lifetime of use. Sturdy one-piece construction is water, rust, corrosion proof and heat resistant to 300°F. **Specs:** Resistivity: 1 x 10^6 to 1 x $10^8\Omega$/sq.; Cleanroom compatible; Low sloughing. **(USA)**

No. 128ST601 5-3/8"L x 4-1/8"W x 3"H **$5.89**
No. 128ST0220 7-3/8"L x 4-1/8"W x 3"H **$7.94**
No. 128ST604 10-7/8"L x 5-1/2"W x 5"H.....**$18.34**
No. 128ST235 10-7/8"L x 11"W x 5"H **$28.74**
No. 128ST602 14-3/4"L x 8-1/4"W x 7"H.....**$47.53**

METRO

Divider Tote Boxes

- Durable, high impact polypropylene
- 12 sizes for maximum space utilization
- Stackable with and without covers
- Dividers available in different heights for maximum customization
- Large, smooth label areas on all 4 sides for easy marking

Bentron™ Black Divider Totes

Electrically conductive for production and manufacturing. Meets ESD standards per EIA-541 and DOD-263A, with proper paddle to ground. 10^2 to 10^5 Ω/sq. **(USA)**

TOTE BOXES (BENTRON BLACK)			DIVIDERS				SNAP ON COVERS		INSERT COVERS	
TT No.	Dimensions L x W x H	PRICE	Long Divider (Length)	PRICE	Short Divider (Width)	PRICE	TT No.	PRICE	TT No.	PRICE
474ST1060	10.9" x 8.3" x 6"	$23.00	474BE534	$4.50	474BE533	$3.50	474BE100	$12.00	474BE537	$12.00
474ST2035	16.5" x 10.9" x 3.5"	$25.00	474ST035	$4.00	474ST9203	$4.50	607MI920	$23.00	474BE538	$19.50
474ST2050	16.5" x 16.5" x 5	$41.50	474BE920	$6.00	474BE920	$6.00	474ST034	$28.00	474ST037	$25.00
607ST2060	16.5" x 10.9" x 6"	$31.50	474BE920	$6.00	474ST9260	$5.00	607MI920	$23.00	474BE538	$19.50
607ST080	16.5" x 10.9" x 8"	$38.50	607MI080	$8.00	474ST080	$6.00	607MI920	$23.00	474BE538	$19.50
474AC030	22.5" x 17.5" x 3"	$51.50	607MI050	$7.00	607MI051	$5.50	607MI390	$37.50	474ST000	$28.00
607ST050	22.5" x 17.5" x 5"	$59.50	474BE9305	$7.00	474ST030	$6.00	607MI390	$37.50	474ST000	$28.00
607ST060	22.5" x 17.5" x 6"	$62.00	474ST0601	$8.00	474ST930	$6.50	607MI390	$37.50	474ST000	$28.00
607ST930	22.5" x 17.5" x 8"	$75.50	607MI930	$9.50	607MI081	$8.00	607MI390	$37.50	474ST000	$28.00
607ST120	22.5" x 17.5" x 12"	$91.00	607MI930	$9.50	607MI081	$8.00	607MI390	$37.50	474ST000	$28.00

Benstat™ Blue Divider Totes

Static dissipative for cleanroom, laboratories and pharmaceutical manufacturing. Meets ESD standards per EIA-541 and DOD-263A with proper paddle to ground. 10^5 to 10^{12} Ω/sq. **(USA)**

TOTE BOXES (BENSTAT BLUE)			DIVIDERS				SNAP ON COVERS		INSERT COVERS	
TT No.	Dimensions L x W x H	PRICE	Long Divider (Length)	PRICE	Short Divider (Width)	PRICE	TT No.	PRICE	TT No.	PRICE
474CA061	10.9" x 8.3" x 6"	$23.00	474ST910	$91.00	474AC106	$3.50	474AC000	$12.00	474BE537	$12.00
607ST932	16.5" x 10.9" x 3.5"	$25.00	474ST2036	$5.00	607ST936	$4.50	607ST962	$23.00	474ST043	$19.50
474AC050	16.5" x 16.5" x 5	$25.00	474AC2050	$6.00	474AC2050	$6.00	474PR050	$28.00	474ST042	$25.00
474ST2060	16.5" x 10.9" x 6"	$31.50	474ST038	$6.00	474ST039	$5.00	607ST962	$23.00	474ST043	$19.50
607ST944	16.5" x 10.9" x 8"	$38.50	607ST946	$8.00	607ST948	$6.00	607ST962	$23.00	474ST043	$19.50
474ST050	22.5" x 17.5" x 5"	$59.50	474ST040	$7.00	474ST041	$6.00	607ST964	$37.50	–	–
474CA060	22.5" x 17.5" x 6"	$59.50	474ST3060	$8.00	474ST0060	$6.50	607ST964	$37.50	–	–
607ST956	22.5" x 17.5" x 8"	$59.50	607ST958	$9.50	607ST960	$8.00	607ST964	$37.50	–	–
607ST512	22.5" x 17.5" x 12"	$91.00	607ST958	$9.50	607ST960	$8.00	607ST964	$37.50	–	–

Conductive Cabinets

Flambeau

Conductive Rototower™ For Cabinets

Uses 3 sq. feet and is 70" tall. Holds your combination of 16 - 379ST026 or 379ST045. *(Cabinets sold separately.)* **(USA)**

No. 379ST161 .....$370.58

Flambeau

Conductive Storage Cabinets

Each cabinet comes with a static-safe ground wire, carbon-filled copolymer shells and drawers. Cabinets are durable, rustproof and dent-proof. Conductive dividers are available. **Specs:** Resistivity: 1 x 10^3 to 1 x 10^6 Ω/sq. *Meets DOD-HDT3K-263.* **(USA)**

12"W x 6-1/4"D x 11-1/4"H. Wt: 16 Lbs.

A. No. 379ST200 20 Drawers $19.50
B. No. 379ST303 30 Drawers $19.50

12"W x 6-1/4"D x 16-1/2"H. Wt: 22 Lbs.

C. No. 379ST026 26 Drawers $19.50
D. No. 379ST045 45 Drawers $19.50

QUANTUM™ STORAGE SYSTEMS

Conductive Dividable Grid Containers

Protect your electronic components from typical electro-magnetic interference (EMI), electrostatic or induced fields by using these molded, carbon-filled, copolymer polypropylene dividable grid containers. Containers, dividers and covers are permanently conductive and are unaffected by washing with normal cleaners. Containers have a load capacity of 40 lbs. Dividers available to customize your box into compartments at 1-1/8" intervals. Snap covers provide contents from dust or damage. **Specs:** Surface Resistance: <$10^5\Omega$/sq.; Color: Black.

Container			Long Divider		Short Divider		Cover	
TT No.	Dims. (L x W x H)	PRICE	TT No.	PRICE	TT No.	PRICE	TT No.	PRICE
672ST9135	10-7/8" x 8-1/4" x 3-1/2"	$9.32	672ST035	$1.54	672ST135	$1.13	672ST9100	$6.46
672ST9150	10-7/8" x 8-1/4" x 5"	$10.89	672ST050	$1.79	672ST150	$1.38	672ST9100	$6.46
672ST9235	16-1/2" x 10-7/8" x 3-1/2"	$12.80	672ST935	$1.91	672ST530	$1.54	672ST9200	$11.94
672ST9260	16-1/2" x 10-7/8" x 6"	$16.09	672ST060	$2.67	672ST206	$2.04	672ST9200	$11.94
672ST9280	16-1/2" x 10-7/8" x 8"	$20.39	672ST980	$3.72	672ST208	$2.61	672ST9200	$11.94
672ST9330	22-1/2" x 17-1/2" x 3"	$28.68	672ST330	$3.33	672ST303	$2.45	672ST9300	$20.56
672ST9360	22-1/2" x 17-1/2" x 6"	$32.40	672ST360	$3.72	672ST306	$3.11	672ST9300	$20.56
672ST080	22-1/2" x 17-1/2" x 8"	$38.22	672ST380	$5.12	672ST308	$3.79	672ST9300	$20.56
672ST120	22-1/2" x 17-1/2" x 12"	$45.56	672ST312	$8.93	672ST012	$7.72	672ST9300	$20.56

Label Holders *(Sold as each)*

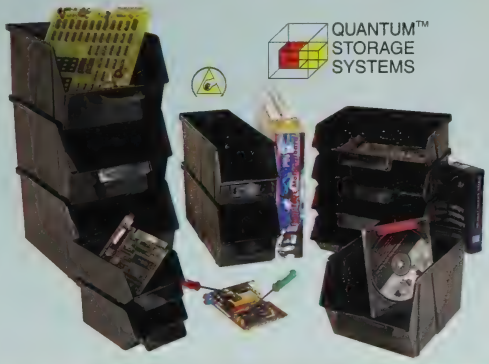
2" x 8" – Fits 672ST9135, 672ST9235, 672ST9330
672ST0208.....$3.30

3" x 5" – Fits 672ST9150, 672ST9260,672ST9360
672ST0305.....$3.53

5" x 8" – Fits 672ST9280, 672ST080, 672ST012
672ST0508.....$3.70

Conductive Ultra Stacking Bins

Conductive material prevents build-up of electrostatic charge. Molded from carbon-filled copolymer polypropylene material with an electrostatic decay rate at less than 0.1 second. Meets military specification Mil-B-81075B. Surface resistivity is less than 10^5/sq. Black.



TT No.	Outside Dimensions (L x W x H)	PRICE
672ST205	4-1/2" x 4-1/8" x 3"	$3.17
672ST210	5-3/8" x 4-1/8" x 3"	$3.33
672ST220	7-3/8" x 4-1/8" x 3"	$4.28
672ST230	10-7/8" x 5-1/2" x 5"	$9.90
672ST233	13-1/2" x 5-1/2" x 5"	$16.57
672ST235	10-7/8" x 11" x 5"	$15.50
672ST239	10-3/4" x 8-1/4" x 7"	$23.43
672ST240	14-3/4" x 8-1/4" x 7"	$24.66
672ST250	14-3/4" x 16-1/2" x 7"	$39.71

TT No.	Outside Dimensions (L x W x H)	PRICE
672ST255	16" x 11" x 8"	$50.68
672ST260	18" x 11" x 10"	$56.56
672ST270	18" x 16-1/2" x 11"	$82.50
Conductive Stack & Lock Bins		
672ST0010	4" x 3-7/8" x 2"	$3.31
672ST0020	7" x 3-7/8" x 2-7/8"	$4.32
672ST0030	10-1/4" x 5-7/8" x 5-1/8"	$12.24
672ST0035	14" x 4-5/8" x 4-7/8"	$17.85
672ST0040	13-1/2" x 8-1/8" x 6-1/8"	$18.89

Conductive Containers

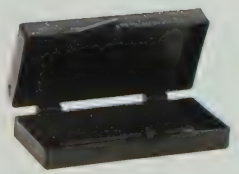
3M Conductive Containers

Made from injected-molded plastic and are non-corrosive. Static sensitive devices can be transported in these containers. They provide protection for direct static discharges and from charged personnel and materials.

Round Containers

2-3/8" Dia. x 7/8"H (Cover - No Lip)
No. 780ST4011 .....$2.80
1-13/16" Dia. x 4"H (Snap-On Cover)
No. 105ST4013 .....$5.81
3-15/16" Dia. x 2-11/32"H (Snap-On Cover)
No. 780ST4014 .....$8.37
3-13/16" Dia. x 4-11/16"H (Snap-On Cover)
No. 780ST4015 .....$11.46

Hinged Containers



2-7/8" L x 1-3/16" W x 1/2" D
No. 780ST4021 .....$1.20
3-7/8" L x 1-15/16" W x 1/2" D
No. 780ST4022 .....$1.80
2-9/16" L x 3-1/2" W x 1-3/4" D
No. 105ST023 .....$1.62
7" L x 3-1/2" W x 1" D
No. 780ST4024.....$3.20
7" L x 5" W x 1/2" D
No. 780ST4025.....$7.92

SMD Conductive Boxes

Flambeau

Conductive Storage Boxes

Reduce electrical resistance and provide a permanent level of conductivity to dissipate static charge build-up while storing and organizing components, parts, and more. Made from a blend of carbon loaded HDPE material, these boxes are stackable and reusable and made for use in harsh environments. **Specs:** Resistance: <10^5/sq.; Meets MIL-B-8/705B and NFPA Code 56A.

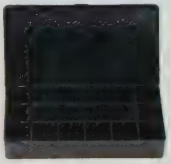
10-1/2"L x 6-3/16"W x 1-9/16"D
Single Compartment
No. 379ST601.....$25.45
18 Compartments
No. 379ST618 .....$30.35

12-1/4"L x 8-3/8"W x 2-1/16"D
Single Compartment
No. 379ST801.....$42.29
24 Compartments
No. 379ST248.....$46.59

For MOS/CMOS Chip Storage!

DEWITT PLASTICS

Conductive Utility Boxes



These non-corrosive, highly-durable boxes are ideal for a wide variety of static sensitive microprocessor-based products. **Specs:** RTT: 1 x 10^3 to 1 10^5/sq.; Material: Black Polypropylene.

7-7/8" x 4" x 1-1/8"; 1 Compartment
No. 674ST072.....$4.00
7-7/8" x 4" x 1-1/8"; 6 Compartments
No. 674ST078.....$4.00
7-7/8" x 4" x 1-1/8"; 12 Compartments
No. 674ST076.....$4.10
7-7/8" x 4" x 1-1/8"; 18 Compartments
No. 674ST074.....$4.05

Corstat™ is the ESD industry's standard for conductive corrugated. For many years engineers have relied on the consistency of Corstat™ material. CorstatTM provides a buried shielding layer and a sealed surface for a controlled path to ground and a surface resistance of 1 x 10^4 to 1 x 10^6/sq. All are made of the highest quality materials, and are 100% recyclable. Shipped knocked-down or assembled. Other sizes are also available.

Holds 275 lbs.!

Corstat™ NestTray® Nestable Totes

These totes are a popular method to transport ESD-sensitive components to the assembly area and empty kitting toes back to the store room for refilling. This extremely durable tote is made with ESD handles.

TT No.	O.D. Top (L x W x D)	I.D. Bottom (L x W)	PRICE
265ST7000	12" x 9" x 4"	8-11/16" x 5-3/4"	$7.18
265ST7010	18" x 12" x 6"	15" x 8-3/4"	$18.31
265ST7020	27-1/4" x 12" x 6"	24-1/2" x 8-3/4"	$18.73
265ST7030	27-1/4" x 18" x 6"	24-1/2" x 15"	$23.56

PillowStat ESD Box

For universal protection of surface mount technologies. Injection molded, pre-labeled ESD shipping boxes with unique PillowStat foam. The conductive foam encases the item so it doesn't move, unlike "sticky gel" used in other boxes, and its static dissipative properties prevent charges. No custom tooling necessary.

2" x 2" x 1/4"
No. 265ST2222 ....$2.11

2-9/16" x 3-1/2" x 1/2"
No. 265ST2535 ....$4.05

7" x 3-1/2" x 1/2"
No. 265ST7035 ....$8.66

2-9/16" x 2-9/16" x 1/2"
No. 265ST3333 ....$3.20

4-5/8" x 3-1/2" x 1/2"
No. 265ST3545 ....$6.61

Corstat™ Drawer Cabinet

The rigid double wall Corstat™ cabinet contain 5 conductive thermoformed drawers with 10 cells per drawer. Each cell is 3" x 1-1/2" x 1". All components are made from the highest quality of conductive materials.

10" x 7-5/8" x 7-7/8" (O.D.)
5 drawers: 10 cells per drawer.
No. 265ST1230.....$41.42

10" x 7-5/8" x 7-7/8" (O.D.)
5 drawers: 5 cells per drawer.
No. 265ST1231.....$41.42

Corstat™ Reel/Dip Tube Bins

Designed to safely store both reels and rail/DIP tubes in the same bin boxes. These bin boxes may be used for storing, kitting, or transporting during work-in-process operations.

TT No.	L x W x H (O.D.)	PRICE
265ST1829	18" x 2" x 9"	$6.10
265ST1849	18" x 4" x 9"	$6.54
265ST2429	24" x 2" x 9"	$7.58
265ST2449	24" x 4" x 9"	$8.04

CorstatTM Reel Totes/Bins

Organizes 7" or 13" reels. Choose from three styles.

TT No.	Description	Reel	Size (L x W x H)	PRICE
265ST2007	Corstat™ Reel Tote	7"	19-3/4" x 7" x 7" I.D.	$45.38
265ST1313		13"	19-3/4" x 13" x 13" I.D.	$51.05
265ST700	Corstat™ Reel Bin (Shown)	7"	17-1/2" x 9-7/8" x 7-3/8" I.D.	$33.50
265ST1300		13"	17-1/2" x 15-7/8" x 13-3/8" I.D.	$47.53

Saves cost vs. static shielding bags!

Corstat™ ESD Bins

Provides ESD protection in-plant for dip tubes, IC's and other components. They are an economical method of completing your static control program with a static shielding storage system. **(USA)**

Open Bins

L x W x H (O.D.)	TT No.	Price/ea.	TT No.	PRICE/case	#/Case
4-1/4" x 3-3/4" x 2-11/16"	265ST1050	$1.86	265ST1050B	$41.65	25
5-3/4" x 3-3/4" x 2-11/16"	265ST1060	$1.92	265ST1060B	$42.93	25
9" x 4" x 4-1/2"	265ST0900	$2.96	265ST0900B	$65.90	25
12" x 2" x 4-1/2"	265ST0950	$3.04	265ST0950B	$74.40	25
12" x 4" x 4-3/8"	265ST001	$3.15	265ST001B	$70.55	25
12" x 6" x 4-1/2"	265ST1003	$3.33	265ST1003B	$74.38	25
12" x 8" x 4-3/8"	265ST010	$3.46	265ST010B	$77.35	25
12" x 12" x 4-1/2"	265ST020	$3.93	265ST020B	$87.98	25
18" x 4" x 4-1/2"	265ST1052	$2.66	265ST1052B	$59.50	25
18" x 6" x 4-1/2"	265ST1053	$3.25	265ST1053B	$72.68	25
18" x 8" x 4-1/2"	265ST1054	$3.80	265ST1054B	$85.00	25
18" x 12" x 4-1/2"	265ST1062	$4.35	265ST1062B	$97.33	25
24-3/4" x 4-1/4" x 4-5/8"	265ST1105	$3.23	265ST1105B	$72.25	25
24-3/4" x 6" x 4"	265ST1125	$3.19	265ST1125B	$71.60	25
24-3/4" x 8-1/4" x 4-5/8"	265ST1144	$3.69	265ST1144B	$82.45	25
25-5/8" x 2-1/4" x 1-5/8"	–	–	265ST1164B	$120.30	25

3M Static-Shielding Single Card Carrier

These injection-molded boxes are lightweight and feature molded pin hinges and an interior lined with dissipative cushion foam. Protects circuit boards from static damage during storage and transport. Interiors are lined with dissipative cushioning foam. Includes snap.

10"L x 8"W x 1-1/4"D
No. 780ST8520 .....$24.43/Ea.

12"L x 9"W x 1-1/4"D
No. 780ST8521 .....$30.37/Ea.

18"L x 17"W x 2"D
No. 780ST8522 .....$68.62/Ea.

10"L x 8"W x 2"D
No. 780ST8523 .....$28.35/Ea.

Conductive corrugated containers are 100% recyclable
- Surface Resistivity of 10^6-10^9.
- Buried shielding layer of $<10^4$.
- Carbon layer buried to minimize sparking.

Best Sellers

Correc-Pak® Shippers

Made of 200 lb."B" Flute, conductive corrugated. Shipped assembled with static dissipative, polyurethane foam is shipped loose. **(USA)**

TT No.	Inside Dim. L x W x D	PRICE
265ST3631	4" x 4" x 2"	$4.09
265ST3080	7" X 5" X 1-1/2"	$4.50
265ST3651	7" x 7" x 5"	$10.36
265ST3661	8" x 8" x 1-1/2"	$8.80
265ST3183	9" x 7-1/2" x 1-1/2"	$6.48
265ST3691	10" x 10" x 4-1/4"	$11.55
265ST3230	10-1/2" X 8-1/2" X 2-1/2"	$7.66
265ST3701	11" x 7-3/4" x 2-7/8"	$9.70
265ST3310	12-1/2" x 10-1/2" x 1-1/2"	$8.44
265ST208	12-1/2" x 10-1/2" x 2-1/2"	$9.43
265ST3525	16" x 12-1/4" x 3-1/2"	$12.58
265ST3568	18-7/8" x 17-5/8" x 1-3/4"	$14.04
265ST1012	20-1/2" x 15-1/2" x 2-1/2"	$15.66
265ST3751	23" x 16-1/2" x 5"	$23.35
265ST3761	24" x 21" x 5-1/2"	$33.55

Corstat™ IC Shippers®

Small component shippers. Boxes shipped assembled with static dissipative, polyurethane foam laminated to top; Foam is shipped loose.

Inside Dim. L x W x D	TT No.	PRICE/ea.	TT No.	PRICE/case	#/Case
2-1/2" x 1-1/4" x 1"	265ST5000	$1.67	265ST5000B	$149.60	100
3-1/2" x 1-1/4" x 1"	265ST5010	$1.88	265ST5010B	$168.30	100
4-1/2" x 1-1/4" x 1"	265ST5020	$1.96	265ST5020B	$175.10	100
2-3/4" x 2-3/4" x 15/16"	265ST525	$2.00	265ST525B	$178.50	100
3-7/16" x 2-1/8" x 1"	265ST5030	$1.84	265ST5030B	$164.90	100
3-3/4" x 3-3/4" x 1"	265ST5040	$3.00	265ST5040B	$268.60	100
4-3/4" x 3-3/4" x 1"	265ST5041	$3.21	265ST5041B	$137.90	48
5-3/4" x 5-3/4" x 15/16"	265ST5055	$4.28	265ST5055B	$95.63	25

Corstat™ In-Plant Handlers

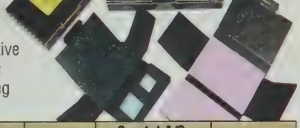
Cost savings opportunity for the movement of circuit boards. Eliminate bags and bagging labor. Includes box, lid and partitions. Boxes have triple ends, double sides, double bottoms, and require no tape, glue or staples for assembly.

Box can be easily knocked down to store flat without damage.
The partitions are rolled over for greater durability and rigidity.

TT No.	Inside Dim. L x W x D	No. Of Cells	PRICE
265ST0442	3-1/2" x 4-3/4" x 3/4"	30	$24.26
265ST4444	3-1/2" x 7-1/4" x 3/4"	20	$23.49
265ST4009	5-3/4" x 6-1/8" 1-5/8"	20	$31.17
265ST1500	7-1/8" x 7-1/2" x 1-5/8"	10	$26.51
265ST4140	8" x 4-3/4" x 1"	40	$39.78
265ST4145	8" x 6-1/2" x 2-1/4"	15	$30.08
265ST4146	8" x 10" x 1"	20	$38.78
265ST4035	10-3/4" x 5-1/4" x 1"	40	$55.56
265ST4015	15-1/4" x 6-1/2" x 1"	30	$43.40
265ST4130	18-5/8" x 15" x 8"	40	$35.72
265ST4183	18-3/4" x 16" x 2-1/4"	5	$34.63

Corstat™ Component Shippers

Folders provide form fit protection with long lasting PillowStat conductive foam inside. Foldpaks provide static dissipative urethane foam cushioning with Corstat static shielding.



Size (L x W x H) I.D.	Corstat Pillow Stat Folder	PRICE	Corstat A/S Foldpak	PRICE
2-9/16" x 2-9/16" x 1/2"	265ST2525	$2.39	265ST252	$1.67
3-1/2" x 1-1/2" x 1/2"	265ST3515	$2.39	265ST351	$1.67
3-1/2" x 2-9/16" x 1/2"	265ST535	$2.47	265ST253	$1.63
4-5/8" x 3-1/2" x 1/2"	265ST354	$4.39	265ST345	$2.68
7" x 3-1/2" x 1/2"	265ST035	$5.91	265ST735	$2.68

Korrvu® Retention Packaging

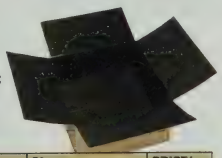
Made with Corstat® conductive corrugated ESD protection, designed to provide clean, secure packaging and eliminate costly foam. Reduces need for custom designs because one size can be used for several products. Simply fold both ends of package and static dissipative film holds the product safely during shipping. Groundable Corstat® container meets S2020 requirements. Recyclable. **(USA)**

9" x 7-1/2" x 2-1/2"
No. 265ST3190 .....**$6.65**
12-1/2" x 10-1/2" x 2-1/2"
No. 265ST3320 .....**$8.05**
15-1/2" x 12-1/2" x 2-1/2"
No. 265ST5300 .....**$8.49**

Combine with static dissipative foam for complete bag-free shipping!

Corstat™ Shipping Cartons

Coated on the inside, Kraft on the outside. Static warning printed on outside. **Features:** Ideal for shipping in bulk; No tooling; No shielding bags; Maximizes pallet space.



TT No.	Size	PRICE/ea.
265ST9155	19-1/2"x15-1/2"x5"	$7.79
265ST9158	19-1/2"x15-1/2"x8"	$8.53
265ST9150	19-1/2"x15-1/2"x10"	$8.97
265ST9152	19-1/2"x15-1/2"x12"	$9.48
265ST9154	19-1/2"x15-1/2"x14"	$9.21

TT No.	Size	PRICE/ea.
265ST3195	23-1/2"x19-1/2"x5"	$9.64
265ST3198	23-1/2"x19-1/2"x8"	$10.26
265ST3191	23-1/2"x19-1/2"x10"	$10.76
265ST3192	23-1/2"x19-1/2"x12"	$11.31
265ST1914	23-1/2"x19-1/2"x14"	$11.81

Check Techni-Tool.com's Tote Selection Guide for more tote and cell size options!

Kitting Trays

CP Kitting Trays

Nestable trays offer versatile in-plant handling and storage for static sensitive components. Vacuum formed trays are made from durable conductive plastic.

TT No.	Outside Dims L x W x H	# of Cavities	Approx. Cavity Size	PRICE
265ST3030	10-1/2" x 8-3/4" x 1-1/2"	12	2-1/4" x 2-1/8" x 1-3/16"	$14.55
265ST3040	14" x 10" x 1-3/4"	9	3-5/8" x 1-1/4" x 1-1/4"	$18.75
265ST3050	14" x 10" x 1-3/4"	12	3" x 3" x 1-1/4"	$18.75
265ST3060	16-1/4" x 10-1/2" x 2"	12	9 @ 3-1/4" x 3" x 1-1/4" 3 @ 4-1/4" x 3" x 1-1/4"	$21.40

Cover for 265ST3030
No. 265ST3031 .....$6.55
Cover for 265ST3040
No. 265ST3041 .....$9.35

Cover for 265ST3050
No. 265ST3051 .....$9.35
Cover for 265ST3060
No. 265ST3061 .....$9.35

CorStacker® Handling Tray

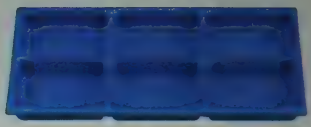
These trays can stack and nest together for safe handling and transporting of your ESD sensitive circuit boards. Includes permanently static dissipative foam laminated to bottom.

18" x 11-3/8" x 1-3/4" (I.D.)
No. 265ST6201.....$33.53

24" x 18" x 2-1/8" (I.D.)
No. 265ST6202.....$50.86

ENDURAL. Component Kit Trays

Static-dissipative tray formed from Royalstat™ R69 H.D.P.E.



Fits into modular boxes for parts kits. A large variety of sizes, arrangements & accessories are available. Size: 14-3/8"L x 6-5/8"W.

TT No.	# of Cavities	Compartment Size Length	Width	Height	PRICE Each
324ST076	6	4-1/8"	2-1/2"	1-3/8"	$28.00
324ST072	9	4-1/8"	1-1/2"	2-1/4"	$28.50
324ST115	12	2-3/4"	1-3/8"	2-1/4"	$29.00

METRO Kitting Trays

Kitting trays provide compartmentalization for small parts or components and are available in Benstat blue dissipative, Bentron black conductive polypropylene-based materials. **(USA)**

Bentron Trays TT No.	Benstat Trays TT No.	PRICE	Outside Dimensions L x W x H	# Of Compartments	Bentron Snap-On Lids TT No.	PRICE	Benstat Snap-On Lids TT No.	PRICE
474ST0903	607ST903	$29.00	15.12" x 9.62" x 1.75"	24	474BE093	$23.00	607ST904	$24.00
607ST909	474ST0909	$28.00	16" x 10.75" x 2.5"	9	474ST9190	$28.00	474ST900	$28.00
607ST912	474ST0912	$28.00	16" x 10.75" x 2.5"	12	474ST9190	$28.00	474ST900	$28.00

Bentron Cups
Single Cup;
2.12"L x 1.62W" x 1.50"H
TT No. 607ST515.....$2.50

Double Cup;
3.4"L x 2.08W" x 1.50"H
TT No. 607MI530.....$3.50

Benstat Cups
Single Cup;
2.12"L x 1.62W" x 1.50"H
TT No. 607ST516.....$3.50

Double Cup;
3.4"L x 2.08W" x 1.50"H
TT No. 607ST153.....$3.50

New!

Benstat cup sold separately

Anti-Static Foam

TECHNI-STAT Anti-Static Foam

Pink anti-static polyethylene resin. This foam, without free carbon, provides superior protection to preclude static damage, with none of the problems of carbon-filled foams. Pink. **(USA)**

No. 758ST2214 12"L x 12"W x 1/4"T.....$1.95

TECHNI-STAT Conductive Foam

24"L x 36"W conductive polyurethane foam with an open cell design to protect devices from damage. **Specs:** Surface Resistivity: 1 x 10^3 to 1 x 10^5Ω/sq.; Charge Decay: <0.05 sec.; Black. **(USA)**

Ideal for physical protection!
Low density - 1.7 to 1.9 lb./ft³
No. 758ST3625 1/4" $11.70
No. 758ST3638 3/8" $15.95
No. 758ST3650 1/2" $17.61

Ideal for IC Chip Storage!
High density - 2.8 to 3.1 lbs./ft³
No. 758ST2425 1/4" $13.46
No. 758ST2438 3/8" $20.75
No. 758ST365 1/2" $27.60

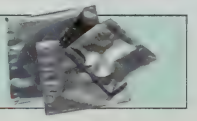
Permanent ESD Safe Foam

CCI offers static safe foams that have permanent ESD properties. Excellent for cleanliness and repeated use. Used for inserting component leads or for cushioning. **Specs:** Resistance: 1 x 10^3 to 1 x 10^5 Ω/sq.; Density: 2 lbs./ft³; Black. **(USA)**

Size (in.)	TT No.	PRICE
19-1/2" x 39" x 1/4"	265ST1939	$22.15
39" x 39" x 1/4"	265ST3939	$73.95
39" x 39" x 3/8"	265ST3938	$61.90
24" x 36" x 1/4"	265ST3624	$26.37

(Resembles foam pictured above)

In Need Of Static Bags?
See pages 308 and 309
or call us at...
800-832-4866!



TECHNI-FACT

Did you know?

You can always depend on Techni-Tool for fast, accurate service.

95% of all orders for in-stock products ship same-day from our own state-of-the-art warehouse. In fact you can order up to 5:30 PM E.S.T. and have your tools on your bench the next day. And our advanced logistics management system uses RF technology to ensure 97% order accuracy.

TECHNI-STAT

Anti-Static Tape

Transparent tape specially designed for use in ESD-sensitive environments. Generates less than 250 volts. **Specs:** Surface resistivity 10^{10} Ω/sq.; Decay time: 5000V to 50V, <0.11 sec.; Thickness: 2.4 MIL; Adhesion: 40oz/in.; Tensile strength: 25 lbs/in.

Clear - 1" Core x 108' Long		
Width	TT No.	PRICE
1/2"	758ST651	$2.19
3/4"	758ST041	$3.00
1"	758ST611	$3.65

Clear - 3" Core x 216' Long		
Width	TT No.	PRICE
1/2"	758ST1653	$3.06
3/4"	758ST044	$4.87
1"	758ST045	$6.31
2"	758ST162	$10.37

TECHNI-STAT

Conductive Grid Tape

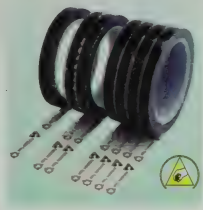
Conductive grid tape has a special Polypropylene middle layer with an anti-static outer layer. **Specs:** Conductive grid layer: 10^4 - 10^5 Ω/sq.; Decay time: 5000V to 50V in <0.01 sec.; Antistatic copolymer layer: 8 x 10^{10} Ω/sq.; Thickness: 49 microns. Meets MIL-B-81705 Standards.

Printed tan/black - 3" Core x 118' Long

No. 758ST605 1/2"W $2.69
No. 758ST1635 3/4"W $5.40
No. 758ST038 1"W $7.00
No. 758ST039 2"W $10.02

TECHNI-STAT

Printed Cellulose Anti-Static Tape with ESD and JEDEC Symbols



Coated with an aggressive non-staining natural adhesive which will stick to most clean and dry surfaces. Complies with DOD standards of static decay, *MIL-B-81705.*

3" core x 72 yds. Long.

No. 758ST047 1/2"W $5.37
No. 758ST048 3/4"W $6.85
No. 758ST049 1"W $8.58
No. 758ST052 2"W $15.98

Clear Printed - 1" Core x 36 yds. Long

No. 758ST1651 1/2"W.....$3.69
No. 758ST1631 3/4"W.....$5.04

3M

40PR Anti-Static Utility Tape

Generates less than 50V on unwind from the roll or removal from a stainless steel surface. Tape is imprinted with ESD symbol. **Specs:** Surface resistance: 5 x 10^6 to 5 x 10^8 Ω/sq.; Thickness: 2.2 MIL. ***Quantity pricing available.***

Printed Anti-Static Tape – 72 yds/roll; 3" Core

No. 105ST7773 1/4"W $5.05
No. 105AD1232 1/2"W $10.12
No. 105AD040 3/4"W $10.12
No. 105AD172 1"W.....$20.22
No. 105AD044 2"W.....$48.99

TECHNI-TOOL

Masking Tape

General purpose grade. Rubber-based adhesive. Length: 60 Yards.

No. 758IE9512 1/2"W....$1.03
No. 758IE9534 3/4"W....$1.30
No. 758IE951 1"W $2.01
No. 758IE7952 2"W $3.10

Prices in this catalog are effective January 1, 2009. While we attempt to hold prices, we cannot control when our vendors increase prices.
We reserve the right to correct misprints.

3M Scotch® Super 33+

Vinyl Electrical Tape

ALL WEATHER!

All weather tape resists UV rays, abrasion, corrosion, alkalies & acids. Flame retardant for splices up to 600V. **Specs.:** Backing:PVC Film; Adhesive: Rubber; Thickness: 7 MIL; Dielectric Strength: 8,050V; Insulation Resistance: >10^6 MΩ/sq.

No. 105ST033 3/4" x 66' $5.22

TECHNI-TOOL

Electrical Tape

New!

General purpose, vinyl, insulating electrical tape. .007" thick x 3/4"W x 66' long.

No. 758IE801B Black $1.50
No. 758IE801BE Blue.....$1.50
No. 758IE801BR Brown $1.50
No. 758IE801GR Green $1.50
No. 758IE801OR Orange $1.50
No. 758IE801P Purple $1.50
No. 758IE801R Red $1.50
No. 758IE801W White.....$1.50
No. 758IE801Y Yellow $1.50

Permacel P28 Electrician's Tape

New!

General purpose, PVC, all-weather, insulating electrician's tape. Ideal for wrapping connections, harnesses tool handles and more. Flame, oil, solvent and abrasion resistant. .007" thick x 3/4"W x 66' long.

No. 450P28B Black.....$2.75
No. 450P28BE Blue.....$2.75
No. 450P28BR Brown $2.75
No. 450P28GR Green $2.75
No. 450P28OR Orange $2.75
No. 450P28R Red $2.75
No. 450P28W White $2.75
No. 450P28Y Yellow $2.75

Anti-Static Tape Dispensers

TECHNI-STAT

ESD Tape Dispenser

Best Seller

Constructed of solid metal and powdered coat non-static generating paint. Plastic rolls have static dissipative clear coating. Bottom pad is made of dissipative and conductive rubber. Rollers move independently.

Holds two rolls of up to 1" wide 3" core tapes or one 2" wide tape.
No. 758ST160 2".....$62.12

Holds three rolls of up to 3" wide core tapes.
No. 758ST603 3".....$75.64

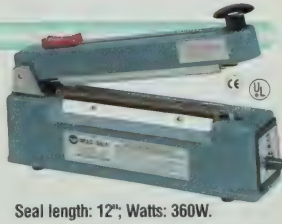
Anti-Static Table Top Tape Dispensers

These tape dispensers hold 1", 2" and 3" wide tape. The 2" and 3" wide dispensers allows use of multiple tapes at one time. **Specs:** Resistance: 1 x 10^5 Ω/sq.; **Includes:** 3/8" (10 mm) ground snap with 10 ft. ground cord. **(USA)**

No. 758ST100 1" $45.65
No. 758ST200 2" $55.75
No. 758ST300 3" $65.95

Sealer

Impulse Hand Sealer



Equipped with a sliding cutting blade to cut excess material 1/4" from seal. Ideal for sealing poly tubing and plastic materials. **Specs:** Max Seal Thickness: 6 MIL; Seal Width: 2mm. **(USA)**

Seal length: 8"; Watts: 260W.
No. 139IE200.....$80.00
No. 139PR200 w/cutter $123.25

Seal length: 12"; Watts: 360W.
No. 139IE300 .....$125.00
No. 139PR300 w/cutter $168.00

Most economically priced static shielding bag!

Techni-Stat® 100 Static Shielding Bag – 100/pk

Extremely durable buried metal construction gives Faraday Cage performance needed to shield against static charges. Contains no amines or amides, is N-Octanoic acid free and polycarbonate compatible. Ideal for packaging of PCB's and IC's. Meets the electrical and physical requirements of MIL-B-81705 REV. C, TY. III, CL. I and EIA 541. Available with static dissipative zipper or reclosable adhesive top closure as an alternative to ESD warning labels. **(USA)**

Techni-Stat® 100 | Techni-Stat® 100 Zip | Techni-Stat® 100 Reclosable

JUST THE FACTS						
	Techni-Stat® 100		Techni-Stat® 100 Zip		Techni-Stat® 100 Reclosable	
EMI Shielding	> 10db		> 10db		> 10db	
Resistivity - Conductive Metal Layer	< 50Ω/sq.		< 50Ω/sq.		< 50Ω/sq.	
Surface Resistivity	< 10^{12}Ω/sq.		< 10^{12}Ω/sq.		< 10Ω/sq.	
Thickness	3.0 MIL		3.0 MIL		3.0 MIL	
Light Transmission	40%		40%		40%	
Puncture Strength	50 lb/in.²		> 12 lb.		50 lb/in.²	
Burst Strength	50 psi		50 lb/in.²		–	
Heat Seal Strength	> 14 lbs./in width		N/A		N/A	
Heat Seal Rec. Temp.	250 to 400 DEG. F		N/A		N/A	
3" x 5"	758ST035	$3.66	758ST305	$8.05	758ST1014	$4.30
4" x 6"	758ST046	$4.75	758ST406	$10.54	758ST1013	$5.53
5" x 8"	758ST058	$7.61	758ST508	$11.73	758ST0058	$8.76
6" x 8"	758ST0068	$7.95	758ST608	$13.60	758ST0112	$9.31
6" x 10"	758ST610	$9.65	–	–	758ST0059	$11.39
8" x 10"	758ST0008	$12.50	758ST810	$18.93	758ST1011	$14.79
10" x 12"	758ST1012	$17.71	758ST112	$26.61	758ST1010	$20.53
12" x 16"	758ST216	$25.88	758ST1216	$35.19	758ST0060	$29.89
12" x 18"	758ST1218	$28.90	–	–	758ST1009	$32.86
15" x 18"	758ST1518	$37.02	–	–	758ST0061	$41.32
18" x 24"	758ST1824	$56.15	–	–	758ST1008	$62.82

Call for CUSTOM Sizes!

Techni-Stat® Dri-Shield 2000 ESD/Moisture Barrier Bags – 100/pk

Designed for dry packaging of electronic devices. Replaces costly nylon/foil laminates with metalized polyester and offers the strongest price/performance relationship. Static safe: dissipative inner and outer surfaces. Used for packaging SMD's in trays, shipping tubes, and reels. Meets requirements of EIA 583, EIA 541, EIA 625, and MIL-PRF-81705, Type 1. **(USA)**

JUST THE FACTS		
	Techni-Stat® Dri-Shield 2000	
EMI Shielding	> 40 db	
Surface Resistivity	< 10^{12}Ω/sq	
Thickness	3.6 MIL	
Light Transmission	< .01%	
Puncture Strength	> 20 lbs.	
Burst Strength	70 psi	
Tensile Strength	> 40 lbs.	
3" x 5"	758ST7035	$9.09
4" x 6"	758ST4670	$10.25
4" x 24"	758ST7424	$34.92
6" x 8"	758ST7068	$17.94
6" x 10"	758ST7610	$20.36
6" x 30"	758ST7630	$57.50
8" x 10"	758ST7810	$26.51
8" x 12"	758ST7812	$31.35
10" x 20"	758ST1020	$56.97
10" x 30"	758ST7030	$84.24
12" x 18"	758ST7018	$69.55
16" x 18"	758ST7016	$77.18
18" x 24"	758ST7024	$131.70

Techni-Tool® Desiccants

Techni-Tool® Desiccants

Provide maximum dryness during transportation and storage of delicate SMDs. Will absorb airborne moisture inside packaging. Envelope made of clean room compatible, sulphur-free Tyvek®. Meets EIA 583 and MIL-D-3464 as required by STD-033. **(USA)**

1/6 unit bags – 1200 ct
No. 758CH1200.....**$103.45**
1/3 unit bags – 700 ct
No. 758CH700.....**$79.28**
1/2 unit bags – 550 ct
No. 758CH550.....**$77.65**
1 unit bags – 300 ct
No. 758CH3000.....**$57.23**
1 unit bags – 1300 ct
No. 758CH1300.....**$274.65**
2 unit bags – 150 ct
No. 758CH1500.....**$50.04**

A. 3M SCC1000™ Metal-In Static Shielding Bags

Transparent, metallized static shield bag for sensitive electronic devices. Faraday cage effect and enhanced durability from sandwiched metal layer (between polyester and polyethylene) and four-layer construction. Meets/exceeds the requirements of MIL-B-81705C Type III, EIA 541, EIA 625, MIL-HDBK-263, MIL-STD-1686, and EOS/ESD Standards. **Specs:** Resistance: <$10^{12}\Omega$/sq.; Static shielding: <30V; Static decay: < 0.05 sec; Tensile strength: >25 lb; Light Transmission: 40%; Thickness: 3.1 MIL. **100/pk. (USA)**

	SCC1000™ Flat		SCC1000™ Zip Close	
Size (in.)	TT No.	PRICE	TT No.	PRICE
2" x 3"	295ST1023	$4.89	295ST203	$7.48
3" x 5"	295ST1035	$5.46	295ST035	$8.97
4" x 6"	295ST1046	$5.98	295ST046	$11.56
4" x 24"	—	—	295ST024	$11.56
5" x 8"	295ST1058	$9.83	295ST058	$16.85
5" x 10"	295ST0510	$11.33	295ST510	$18.92
6" x 8"	295ST1068	$10.47	295ST068	$18.06
6" x 10"	295ST0610	$11.73	295ST610	$20.13
8" x 10"	295ST0810	$17.02	295ST810	$28.69
8" x 12"	295ST0812	$19.61	295ST812	$29.90
10" x 12"	295ST1002	$22.66	295ST012	$38.30
10" x 14"	295ST1004	$26.97	295ST3014	$44.85
11" x 15"	295ST1115	$33.35	295ST3115	$48.76
12" x 18"	295ST1218	$41.46	295ST3218	$59.80
15" x 18"	295ST1008	$53.07	295ST3518	$71.36
18" x 24"	295ST1024	$84.46	295ST3824	$110.75

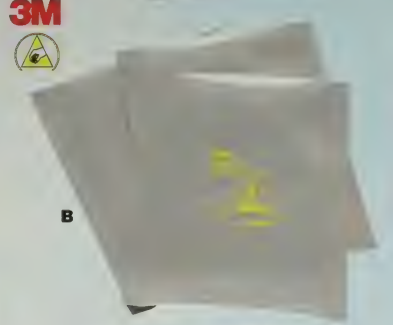
New! IC Tube Bags

Size (in.)	TT No.	PRICE	Size (in.)	TT No.	PRICE
4" x 24"	295ST0424	$22.43	4" x 26"	295ST426	$23.17
6" x 24"	295ST0624	$28.12	6" x 26"	295ST0626	$33.75
8" x 24"	295ST8240	$35.02	8" x 26"	295ST0826	$43.74
10" x 24"	295ST2410	$48.24	10" x 26"	295ST2610	$55.37

B. 3M 2100R Metal-Out Static Shielding Bags

Shielding layer is near surface with a thin abrasion-resistant coating protecting metal from scratches without interfering in static dissipation. Metallization layer is applied to a sturdy polyester layer that is double the thickness of economy bags. Interior features an ammine-free antistat agent that limits tri-boelectric charging of parts as they move around inside bag. Doesn't contribute to corrosion of parts. Functions in conditions as low as 10% RH. **Specs:** Surface Resistivity: Interior: <$10^{11}\Omega$, Exterior: <$10^{8}\Omega$, Metallized layer: <$10^{2}\Omega$/sq; Thickness: 3.2 MIL.

	Metal-Out Flat		Metal-Out Reclosable	
Size	TT No.	PRICE	TT No.	PRICE
3" x 5"	105ST305	$15.65	780ST035	$19.41
4" x 6"	105ST210	$19.66	105ST211	$25.81
6" x 8"	780ST608	$32.87	780ST211	$44.06
8" x 10"	105ST810	$41.31	105ST021	$56.25
8" x 12"	780ST812	$41.31	105ST812	$61.53
10" x 12"	105ST2100	$58.22	105ST2110	$76.46
11" x 15"	780ST1015	$81.72	150ST112	$107.41
15" x 18"	780ST1518	$123.37	—	—
18" x 18"	105ST2106	$147.25	—	—



C. 3M SCC1300™ Metal-In Static Shielding Bags

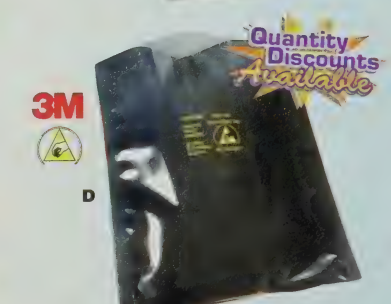
Transparent, metallized static shield bag provides static safe environment for sensitive electronic devices. 3.5 mil, 4-layer construction. Polyester dielectric and metal layer provides Faraday effect shielding of ESD and fields. Tribocharging is minimized by the special polyethylene. **Specs:** Resistance: <$10^{12}\Omega$/square; Static shielding: <30 volts; Static decay: <0.05 seconds; Puncture resistance: >15 lbs.; Light transmission: 40%; Thickness 3.5 mil. **100/pk (USA)** ***2-week lead time.***

SCC1300™ Metal-In Static Shielding Bags					
Size (in.)	TT No.	PRICE	Size (in.)	TT No.	PRICE
4" x 24"	295ST1424	$39.64	4" x 26"	295ST2426	$42.16
6" x 24"	295ST2624	$49.46	6" x 26"	295ST2626	$52.67
8" x 24"	295ST2824	$61.59	8" x 26"	295ST2826	$65.63
10" x 24"	295ST2124	$72.45	10" x 26"	295ST2126	$77.12

D. 3M SCC1500™ Metal-Out Static Shield Bags

The metal layer in these bags are placed close to the surface for low resistance readings. Four-layer construction for puncture and tear protection. Meets/exceeds the requirements of MIL-B-81705C Type III, EIA 541, EIA 625, MIL-HDBK-263, MIL-STD-1686, and EOS/ESD Standards. **Specs:** Resistance: 1 x 10^{5} to 1 x $10^{12}\Omega$/sq.; Static shielding: <30V; Static decay: < 0.05 sec; Tensile strength: >20 lb; Light Transmission: 40%; Thickness: 3.1 MIL; **100/pk. (USA)**

SCC1500™ Metal-In Static Shielding Bags								
Size (in.)	TT No.	PRICE	Size (in.)	TT No.	PRICE	Size (in.)	TT No.	PRICE
4" x 6"	295ST5046	$9.66	8" x 12"	295ST5812	$22.89	15" x 18"	295ST1518	$59.23
6" x 8"	295ST5068	$14.20	10" x 12"	295ST1012	$27.77	18" x 18"	295ST1818	$72.97
8" x 10"	295ST1581	$20.24	12" x 16"	295ST1216	$47.44	18" x 24"	295ST1824	$91.94



Pressure Sensitive Labels

TECHNI-STAT

Best Seller

Attention Label MIL STD-129
ESD Susceptibility Symbol; JEDEC/EIA471.
Reusable
2" x 2" - 500 labels per roll.
No. 758ST721 .....$12.25
Destructible
2" x 2"; 500 labels per roll.
No. 758ST722 .....$12.23
4" x 4"; 500 labels per roll.
No. 758ST728 .....$30.58

Destructible Attention Label
5/8" x 2" JEDEC/EIC471 label with ESD warning symbol and text.
3" core, 1000/roll. **(USA)**
No. 758ST057 .....$8.04

A
B

Attention Label - MIL STD-129
5/8" x 2"; 500 labels/roll. JEDEC/EIA471.
A. Destructible
No. 758ST0673 .....$7.73
B. Reusable
No. 758ST672 .....$7.73

Reusable Destructible

Reusable Static Awareness Label
Mark assemblies with ESD susceptibility symbol.
Reusable - 1-3/4" x 2"; 500 labels/roll.
No. 758ST6713 .....$20.06

Writable Awareness Label JEDEC-14
Destructible 1-3/4" x 2-1/2"; 500 labels/roll.
No. 758ST6712 .....$20.06

Attention Label JEDEC/EIA471
Destructible
4" x 4"; 250 labels per roll.
No. 758ST6736 .....$14.73
Reusable
2" x 2"; 500 labels per roll.
No. 758ST675 .....$12.23

TECHNI-STAT

Caution - Sensitive Electronic Devices Label
Black/Yellow Label; 500/Roll. Old MIL STD.
Reusable
No. 207ST903 2" x 2" $25.75
No. 207ST904 4" x 4" $54.17
Destructible
No. 758ST032 2" x 2" $11.83
No. 758ST031* 4" x 4" $7.87

3M

Best Sellers

Reusable Destructible

Attention Label
1-8/7"L x 2.5"H; 500 labels/roll. JEDEC-141 and MIL STD-129.
Reusable
No. 780ST7101 .....$28.87
Destructible
No. 780ST7102 .....$32.09

Attention Label - MIL STD-129
Reusable 2"L x 2"H; 500 labels/roll.
No. 780ST7201 .....$36.51
Reusable 4"L x 4"H; 250 labels/roll.
No. 780ST7203 .....$59.12
Destructible 2"L x 2"H; 500 labels/roll.
No. 780ST7202 .....$36.51
Destructible 4"L x 4"H; 250 labels/roll.
No. 780ST7204 .....$59.25

TECHNI-STAT

Lead-Free Contents Labels
Green lead-free labels for marking bags, boxes or other containers of lead-free components. 2" x 2", bright green label with permanent adhesive. 500/Roll
No. 758ST6710 .....$30.58

Lead-Free Label
RoHS compliant; green, 2" x 2" label. 500/Roll
No. 758ST7102 .....$10.94

3M

Lead-Free RoHS Label
For marking lead-free products or materials used in lead-free production. Green adhesive label. 1.75" x 1.75", 3" core. 500/roll
No. 295ST005 .....$12.08

Work Area Signage

TECHNI-STAT

Floor Tape - JEDEC/EIA471
Vinyl coated, scuff-resistant floor tape.
No. 758ST0161 3" x 54' $32.09
No. 758ST163 3" x 108' $45.62

Attention Sign - RS-471
4" x 10" - Plastic, black on yellow sign with self-sticking double-sided mounting tape. JEDEC/EIA471. 10/Pk.
No. 758ST745 .....$41.31

Awareness Bench Sign - JEDEC/EIA471
Rigid plastic, Self-sticking. 1" x 6"; 10/Pk.
No. 758ST674 .....$12.56

ESD Awareness Poster - JEDEC/EIA471
With self-sticking mounting tape.
11" x 17"; 5/Pk.
No. 758ST717 .....$15.12
Double sided; two holes for hanging.
10" x 20"; 3/Pk. (Not Shown)
No. 758ST743 .....$51.19

TECHNI-TOOL

Lane Marking Safety Tape
Identify special floor areas around equipment or other designated areas. Diagonal stripes. 5 MIL. **(USA)**
Yellow/Black - 3" x 18 yards
No. 758IE2118 .....$51.19
Yellow/Black - 2" x 18 yards
No. 758IE2018 .....$7.73

3M

3M 5702 Safety Stripe Tape
Safety stripe vinyl plastic tape with 2" (50.8mm) wide alternating colored stripes. Designed to mark floors and objects to identify safety areas and physical hazards. 2" x 108' (36 yds.).
No. 105AD702 Black/Yellow $38.23
Black/White
No. 105AD700 Black/White $38.88

295ST8511

3M

295ST8512

ESD Warning Sign
Black lettering on a yellow background. Meets EIA 625 and Mil-HDBK-263 requirements. Includes adhesive strip for easy mounting.
8-1/2" x 11"
No. 295ST8511 .....$8.20
4" x 10"
No. 295ST8512 .....$4.04

295ST1722 295ST1723

Large ESD Warning Sign in English or Spanish
17" X 22" poster size makes these ideal for entry areas. Black lettering on yellow background provides clear warning and meets EIA 625 and Mil-HDBK-263 requirements.
English
No. 295ST1722 .....$6.82
Spanish
No. 295ST1723 .....$6.82

TECHNI-STAT

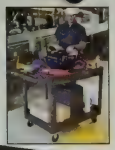
Lead-Free Floor Tape
Green lead-free floor tape for indicating lead-free areas. 3" x 18 yards.
No. 758ST1628 .....$37.67

3M

Lead-Free Aisle Marking Tape
Designate areas and equipment for lead-free production. 6 mil, scuff resistant tape features the no-lead PB warning symbol and message. High contrast green and white PVC tape is easy to see. 3" wide, 54' long on a 3" core. Message repeats every 12".
No. 295ST006 .....$25.80

TECHNI-STAT

Label Dispenser
Holds two 2" rolls or one 4" roll of labels for easy operation.
No. 758ST6702 .....$62.12



Utility Carts

Versatile, durable plastic carts perform a wide variety of operations. Easy-to-clean, smooth surfaces resist scratches, chips and rust. Lightweight, easy-to-handle, with quiet non-marking casters. User-friendly handles. Rounded corners won't damage walls.

New!

3-Shelf Utility Cart with Enclosed End Panels
18"W x 31"D x 37-1/2"H. 300 lb capacity. Platinum.
A. No. 687BE3355 .....$449.59

3-Shelf Utility Cart with Brushed Aluminum Uprights
Rim on shelves keep contents from spilling. 18-5/8"W x 33-5/8"D x 37-3/4"H. 200 lb. capacity. Black.
B. No. 687BE3424 .....$277.54

Heavy Duty Locking Instrument Cart
Locking bottom cabinet, sliding top drawer. 40-5/8" W x 20"D x 37-13/16"H. 300 lb. capacity. Gray.
C. No. 687AC094 .....$539.16

2-Shelf Heavy-Duty Utility Cart
Tray-style shelves. Top shelf features cup holder and storage slot to stay organized. 500 lb. capacity.
D. No. 687BE4501 17-7/8"W x 39-1/4"D x 33-1/4"H, Black $255.74
No. 687IE4508 17-7/8"W x 39-1/4"D x 33-1/4"H, Beige $258.70
No. 687IE520 25-7/8"W x 45-1/4"D x 33-1/4"H, Black $238.55
No. 687IE4579 25-7/8"W x 45-1/4"D x 33-1/4"H, Beige $238.55

2-Flat Shelf Heavy Duty Utility Cart
Flat shelf for easy loading. Small parts bin in handle. Bracket for extension cord. 500 lb. capacity.
37-9/10"W x 19-1/5"D x 33-3/10". Black.
E. No. 687IE505 .....$262.33

New!

Mobile Workcenters

Move productivity right to your work site – total tool storage and mobile workbench systems. Durable, won't rust, chip or dent. Rolls easily over all surfaces.

4-Drawer TradeMaster® Cart
Molded-in small part compartments. Single key locks all drawers and allows one drawer to open at a time. Ball-bearing drawer slides. Comfort handle. 4 casters, 2 locking. Red/Black.

4-Drawer Cart with Locking Cabinet for tool security.
26-1/4"W x 49"D x 38"H. 750 lb. capacity
F. No. 687IE4533.....$1,038.90

4-Drawer Cart, 18-3/8"W x 40-5/8"D x 33-3/8"H. 500 lb. capacity.
G. No. 687IE4513 .....$797.09

2-Drawer Trades Cart
Ergonomic top surface doubles as work area. 2 drawers, 4 removable part boxes, storage bin in handle. Bracket for extension cord. 4 swivel casters, 2 locking. 19-1/4"W x 38"D x 33-3/8"H. 450 lb. capacity. Red/Black.
H. No. 687BE808 2-Shelf Cart w/Locking Cabinet for tool security $644.78
I. No. 687IE180 2-Shelf Cart $445.34

5-Drawer Mobile Workcenter
5 drawers, 5 small parts bins set into surface. Built-in cord wrap. Locking bar keeps tools secure. 4 swivel casters, 2 locking. 19-3/4"W x 32-5/8"D x 33-1/2"H. 250 lb. capacity. Red/Black.
J. No. 687ST331.....$459.82

QUANTUM™ STORAGE SYSTEMS

Plastic Mobile Carts

Industrial strength cart ideal for general material handling applications. 550 lbs. load capacity. Set of 2 swivel and 2 rigid 5" x 1-1/4" heavy-duty casters. Gray.

40" x 26" x 32-1/2"
No. 672IE0012 .....$193.45

34-1/4" x 17-1/2" x 32-1/2"
No. 672IE0011 .....$111.20

BAYCO

Reverse Retractable Cord Reel

For attaching to mobile work carts. 25' of 10 amp, 16/3 cord with single outlet. Stationary end is female (18"), pull-out end is male (25').
No. 629IN8125.....$70.00

Rubber Snub-Keeps Instruments in Place!

A. Easy-Up Carts Mobile Instrument Cart

Support test instruments at a convenient height & angle. Back support arm adjusts laterally to accommodate instruments of various sizes; pivots to avoid cords and other projections. Movable rubber snub keeps instruments in place. Tubular steel construction. Top 15-1/8" W x 19"D, overall height 34". Includes lower, laminated shelf. Wt.: 25 lbs. 100 lbs. cap. **(USA)**

No. 324BE456 .....$120.00

Same as above, but with wider top, 23"W x 19"D, overall height 34". Accommodates larger instruments or two instruments side by side. Wt.: 31 lbs.

No. 324BE458 .....$117.25

B. All Purpose Service Cart

Standard height 30"; top is 24" x 24". Legs and braces of 1" heavy-gauge tubing. Bright hot-dip galvanized – no chipping, no rusting. Lower laminated shelf. Wt.: 29 lbs. **(USA)**

No. 324BE045 .....$108.00

Mobile Scissor Lift Tables

Foot operated pump. Easy to use spring loaded release lever. 5" x 1-1/2" polyurethane casters with locks. **Specs:** Table Size: 19-1/2" x 32"; Lowered Height: 11"; Raised Height: 35"; Capacity: 700 lbs.; Overall Dims.: 37"H x 42"L x 19-1/2"W; Weight: 165 lbs.

No. 873IE199 .....$764.60

AKRO-MILS®
A Myers Industries Company

C. ProCart™

Quickly and easily convert the ProCart™ to a flat-top or a box-top cart with one hand. Hinged side gates on both shelves flip up and down for different cart configurations. No tools needed for conversion. Designed with molded-in compartments on the handles for holding your hand-held items securely during transport. Each shelf can hold 200 lbs.

Features: Reinforced construction for rugged use; Dent-resistant and rust-proof panels; Durable non-marking wheels with toe-touch locking rear wheels.

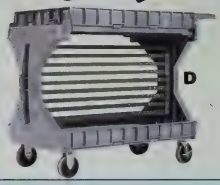
Large cart - 45"L x 24"W x 32"H
No. 128PR309 .....$315.22

Small cart - 40"L x 19.5"W x 32"H
No. 128PR930 .....$267.92

D. 9-rail systems for hanging AkroBins.
See page 300 for bin ordering information.

Fits ProCart 128PR309
No. 128IE310.....$80.47

Fits ProCart 128PR930
No. 128IE311.....$54.50



Fold-down handle, heavy vinyl deck!

Folding Handle Platform Truck

These rugged platform trucks come in two convenient sizes and feature a fold-down handle for easy storage; enamel finish with non-skid, heavy vinyl deck; and thick perimeter vinyl bumper.

400 lbs.: 29"L x 19"W; 4" casters; Wt.25 lbs.
No. 873MI019.....$150.50

600 lbs.: 35"L x 23"W; 5" casters: Wt: 41 lbs.
No. 873MI035 .....$270.30

TECHNI-TOOL

Save money on lost tools with Techni-Tool Tool Control

New!

Reduce tools costs by spotting missing items instantly with Techni-Tool Tool Control. It's the fast, efficient way to keep track of tools in tool cribs and throughout your facility.

We die-cut each foam drawer insert from high-density chemical-resistant polyethylene to match your specific tools. Foam is available in red, black, blue and yellow to help you organize your tools even further. Standard inserts fit 4-, 5-, 6-, 7-, 8- and 15-drawer Waterloo cabinets and chests. Custom inserts are available for other tool containers – call for details.

Call us at **800-832-4866** to get started. If you're buying new hand tools and Waterloo chests we can deliver them together with finished inserts. If you're outfitting existing storage equipment you'll need to send us the tools you want for each insert. Extremely rapid turn around time. Drawer inserts are guaranteed for life.

	Fits Tool Chest			No of Inserts and Dimensions - L x W x D (Inch)			
TT No.	TT No.	Waterloo No.	Description	Long Drawers	Short Drawers	Top Trays	PRICE
758CA0267	866IE267	TRX267	7-Drawer Chest	5 (22.25 x 16.5 x .5)	2 (10.5 x 16.5 x 5)	1 (16.10 x 17.80 x 0.5)	$735.25
758CA2707	866IE2707	TRX2707	7-Drawer Cabinet	7 (22.25 x 16.5 x .5)	–	–	$712.50
758CA0807	866IE0807	TR71807B	7 Drawer Roller Cabinet	7 (22.25 x 16.5 x .5)	–	–	$712.50
758CA1203	866IE203	TR21203B	3-Drawer Intermediate Chest	3 (26 x 12 x .5)	–	–	$258.80
758CA1804	866IE1804	TR51804B	4-Drawer Intermediate Chest	4 (26 x 17.75 x .5)	–	–	$407.15
758CA1205	866IE1205	TR61205B	5-Drawer Chest	2 (22.25 x 10.5 x .5)	3 (8 x 10.5 x .5)	1 (26 x 12 x .5)	$291.05
758CA1206	866IE1206	TR61206B	6-Drawer Chest	4 (22.25 x 10.75 x.5)	2 (10.6 x 10.75 x.5)	1 (26 x 12 x .5)	$414.65
758CA1807	866IE1807	TR61807B	7-Drawer Chest	4 (26 x 16.5 x .5)	3 (6.7 x 16.5 x .5)	1 (26 x 17.5 x .5)	$692.10
758CA1808	866IE1808	TR71808B	8-Drawer Roller Cabinet	8 (22.25 x 16.5 x .5)	–	–	$814.25
758CA7180	866IE7180	TR71804B	4-Drawer Roller Cabinet	4 (22.25 x 16.5 x .5)	–	–	$523.20
758CA4106	866IE4106	TRX4106	6-Drawer Roller Cart & Cabinet	6 (22.25 x 16.5 x .5)	–	1 (36.75 x16.5 x .5)	$777.60
758CA1815	866IE1815	TR11815B	15-Drawer Roller Cabinet	9 (22.25 x 16.5 x .5)	6 (11.75 x16.5 x .5)	–	$1,235.70

WATERLOO

Ball Bearing Tool Chests and Carts

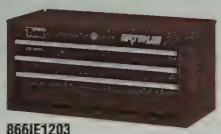
Ball-bearing slides, interchangeable drawers and mobility at an affordable price!

Traxx® Series is designed for professionals who need ball-bearing slides, interchangeable drawers and mobility at an affordable price.

- Posi-Latch™ drawer securing system provides a positive latch for each drawer and reduces accidental opening
- Sidewall post construction adds strength while reducing overall weight
- Full extension ball-bearing slides provide complete drawer access
- 14 gauge caster support channels and extra large casters can support up to 1,200 lbs. (544 kgs)
- Interchangeable drawer system with quick-release slides allows for flexibility in drawer configurations
- ***Seven-Year Warranty***

866IE267

866IE2707 866IE0807


866IE1203

866IE1804

866IE1205 866IE1206 866IE1807

TT No.	Description	PRICE
866IE267*	26" Red, 7-drawer chest	$877.95
866IE2707*	26" Red, 7-drawer cabinet	$1,037.15
866IE0807	26" Brown, 7 drawer roller cabinet, 1200 lb. load rating	$679.35
866IE1203	26" Brown, 3 drawer intermediate chest fits on 866IE7180, 866IE0807, 866IE1808, 866IE1815	$297.38
866IE1804	26" Brown, 4 drawer intermediate chest fits on 866IE7180, 866IE0807, 866IE1808, 866IE1815	$437.32
866IE1205	26" Brown, 5 drawer chest fits on 866IE7180, 866IE0807, 866IE1808, 866IE1815	$394.15
866IE1206	26" Brown, 6 drawer chest fits on 866IE7180, 866IE0807, 866IE1808, 866IE1815	$514.95
866IE1807	26" Brown, 7 drawer chest fits on 866IE7180, 866IE0807, 866IE1808, 866IE1815 (Tool Tote Tray Included)	$610.50
866IE7180	26" Brown, 4 drawer roller cabinet, 1200 lb. load rating	$564.20
866IE1808	26" Brown, 8 drawer roller cabinet, 1200 lb. load rating	$820.90
866IE4106*	41" Red, 6-drawer cart with room for storage	$1,677.64
866IE1815	40" Brown, 15 drawer roller cabinet 1200 lb. load rating	$1,257.30

**** Includes Drawliners***

866IE7180

866IE1808

866IE4106

866IE1815

Steel Tool Boxes

Full width piano hinge provides added strength and a secure lid. All models are lockable with heavy-plated, rust-resistant latches. Comfort grip handle fits the shape of your hand.

866IE30120 866IE1630 866IE2050

TT No.	Description	Dimensions W x D x H	PRICE
866IE30120	Low Profile Tool Box	19.69" x 6.1" x 3.5" 500mm x 156mm x 89mm	$26.92
866IE1630	Tool Box with Plastic Tote Tray	16.1" x 7.0" x 7.5" 408mm x 177mm x 191mm	$32.36
866IE2050	Mechanic's Tool Box with Metal Tote Tray	20.1" x 8.0" x 9.0" 510mm x 204mm x 229mm	$44.88

Plastic Tool Storage Boxes

Heavy-duty, high-impact polypropylene resins for strength. Flush top design provides convenient stacking. Lightweight yet strong and will not dent, rust or mar other surfaces. Piano-type hinge. Metal latches provide secure closure.

866IE2051

TT No.	Description	Dimensions W x D x H	PRICE
866IE2051	20" Tool Box	19.9" x 8.5" x 8.9" 504mm x 216mm x 225mm	$28.04
866IE2271	22" Large Capacity Tool Box	21.8" x 9.5" x 9.6" 554mm x 241mm x 244mm	$33.10

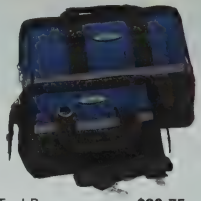
TECHNI-TOOL

Mechanic's Tool Bag

Water repellent, 1000 denier DuPont Cordura® Plus nylon with large, oversize zipper and heavy-duty web strap handles. Two outside and eight inside pockets. **(USA)**

No. 758CA240 Black **$17.00**
No. 758CA242 Navy **$17.00**
No. 758CA244 Olive (Not Shown) **$18.50**

Builder's Tool Bag



Durable ballistic construction with reinforced bottom. 21 pockets and extra-wide opening. Shoulder strap. (China)

No. 534AC316 16" Tool Bag **$20.75**
No. 534AC312 12" Tool Bag **$16.70**

Milwaukee

Contractor Bag

Tough, water-resistant 600-denier material bag with both shoulder strap and dual handles. Durable zipper. 17"L x 9"W x 10"H

No. 575IE3490 .....**$27.52**
18"L x 11"W x 10"H
No. 575IE3510 .....**$32.80**

CLC Custom LeatherCraft

Carries large items plus small parts in compartment tray!

Tray-tote Bag

Large soft-sided tool bag includes fourteen pockets – 2 inside and 12 outside.

Features: multi-compartment plastic tray (13-1/2"W x 9"D) that slides securely into bag bottom. Wide-opening top for easy access to contents. Polyester. 16"L x 9"W x 12"H. (China)

No. 658CA1139 (1139) **$47.70**

CLC Custom LeatherCraft

Big Mouth Bag

Opens wide for easy access to contents, plus 12 multi-use pockets inside and outside organize tools and accessories. Includes padded reinforced web carrying handles and adjustable shoulder strap. Polyester. 16"L x 8-1/2"W x 10"H. (China) *(Tools not included.)*

No. 658CA1165 (1165) **$27.55**

IDEAL

Thirty Outer Pockets Hold Your Tools!

Electrician's Carrier™ Tool Bag

Made from heavy-duty, 18 oz. canvas. Wide inner compartment (10"D x 17"L x 6-1/4"W) with open top provides easy access to bag contents. Thirty stitched outer pockets. *(Tools not included.)*

No. 462CA534.....**$57.24**

MENDA

Anti-Static Toolbox

Made of permanently static dissipative durAstatic E9 polypropylene. RTT 10E9 - 10E10 ohms. No surface coating makes it easy to clean. Convenient handle and latch. 14-1/2" X 7-1/2" X 5".

No. 548ST148 .....**$32.50**

Flambeau Products

Tool Brute®

Comfortable, full-grip handle, positive-action latches, solid brass pins, padlock tabs. Molded co-polymer resins provide rustproof, chemical resistant, non-conductive, rugged construction. Color: Gray. **(USA)**

14-1/2"L x 5-3/4"W x 7-1/4"D - 1 latch
No. 379CA148 .....**$11.83**
16-5/8"L x 7-1/8"W x 8-3/4"D - 1 latch
No. 379CA178 .....**$21.05**
20-1/4"L x 8-3/8"W x 8-7/8"D - 2 latches
No. 379CA198 .....**$25.54**

AKRO-MILS

ProBoxes

Won't chip, crack, rust or corrode. Made of durable polypropylene with extra-large trays. Steel draw latches close securely and have an oversized eye for larger padlocks. 14"L x 8.08"W x 8.125"H

No. 128ST514 .....**$16.65**

WATERLOO

3-Drawer Plastic Portable Chest

Plastic shell with all steel full-extension drawers. Measures: 23"W x 10.4"D x 13.4"H.

- Heavy duty high-impact polypropylene resins
- Will not dent, rust or mar other surfaces
- Sure-grip handle
- Flush top for convenient stacking and storing

No. 866IE2331 ..**$68.40**

Best Seller

TEC-TUFF

Carry everything you need in one durable nylon case with briefcase, tool and laptop sections!

Wheeled Tool/Laptop Zipper Case

Briefcase Section:
- Large compartment with pockets for business items
- Slash pocket on outside of business compartment with water bottle holder

Laptop Section:
- Lockable zipper for added security
- Removable padded pouch with Velcro closure (14" x 10" x 2")
- Removable padded cable pouch
- If no laptop, can store a pallet

Tool Section:
- Lockable zipper for added security
- 3 meter pockets
- Clips to hold 1 or 2 pallets

The 36" telescoping handle, two semi-recessed wheels and padded, double riveted leather handle make it easy to take all of your equipment and supplies anywhere. Black 18" x 13" x 9".

Case Only
No. 758CA600 .....**$216.00**

Case with pallets (tools not included)
No. 758CA7233 .....**$260.80**

Best Seller

TECHNI-STAT

Conductive Tool Box

This molded copolymer tool box can't rust and is suitable for cleanroom use. **Features:** Positive action latches; Brass hinge and latch pins; molded-in padlock tabs; luggage-style handle. Tray dimensions: 12-1/4"L x 4-3/4"W x 1-1/2"D. **(USA)**

No. 758ST148 .....**$44.86**

FREE ESD and chemical audits – just call 800-832-4866!

WESCO

Super lite Folding Hand Trucks

- Aluminum/poly construction; Maxi Mover features steel construction
- Folds flat for easy transport and storage
- Easy push button operation for quick set-up

Model	Maxi Mover	Super Lite	Mini Mover
TT No.	873IE649	336BE781	873IE646
Capacity	250 lbs.	175 lbs.	110 lbs.
Extended Dims.	42" x 19" x 19"	42" x 19" x 19"	40" x 15-1/2" x 2"
Folded Dims.	29-1/2" x 19" x 2"	29-1/2" x 19" x 2"	24" x 15-1/4" x 2"
Noseplate Dims.	19"W x 12"D	19"W x 12"D	15"W x 12-1/2"D
Wheel Size	7" x 1-1/2"	7" x 1-1/2"	5" x 1-1/4"
Weight	12 lbs.	8.4 lbs.	7.25 lbs.
PRICE	$180.10	$172.70	$112.50

873IE649 336BE781 873IE646

Clipper Carts

- Increase productivity - get the job done faster, easier and with less effort every time
- Gain the professional's edge - look and be your best in front of the customer
- Stay healthy - reduce back strain, muscle pain, fatigue

Model	Clipper 4 Wheel Cart	Clipper Instrument Cart	Clipper Super Cart
TT No.	274BE880	274BE002	274BE882
Capacity	400 lbs	400 lbs	400 lbs
Open Size	Height: 52"; Base: 16.5" x 31"	Height: 52"; Base: 16.5" x 31"	Height: 52"; Base: 16.5" x 19"
Closed Size	25"H x 16.5"W x 6.5"D	25" x 19" x 6.5"	25" x 16.5" x 6.5"
Platform Size	16" x 12.75"	Lower 16" x 12.75", Upper 19" x 17"	16" x 12.75"
Adjustable Handle	Yes	Yes	Yes
No. of Wheels	4	4	2
Wheel Size	front 6", rear 3"	front 6", rear 3"	6"
Weight	20 lbs.	26 lbs.	16 lbs.
Warranty	Lifetime	Lifetime	Lifetime
PRICE	$152.90	$254.95	$115.50

274BE002

SUPER 400 LB CAPACITY

274BE880 274BE882

REMIN

Remin Carts

- Patented, push-button locking system
- Chrome plated solid steel wheel guards to protect loads.
- Adjustable lock on permanently attached elastic cords prevents load shifting

Model	Remin Super 600	Remin Tri-Cart 800
TT No.	677PR600	677MI800
Capacity	300 lbs	300 lbs
Open Size	Height: 48"; Base: 15.75" x 12.5"	Height: 48"; Base: 15.75" x 12.5"
Closed Size	20.25"H x 16"W x 7"D	20.25"H x 16"W x 7"D
Platform Size	12-1/2" x 16"	12-1/2" x 16"
Adjustable Handle	Yes	Yes
No. of Wheels	2	2
Wheel Size	6"	6"
Weight	11 lbs.	13 lbs.
Warranty	10-Year	10-Year
PRICE	$290.00	$214.50

Best Seller

LARGE 300 LB CAPACITY

677PR600 677MI800

ATA Shipping Cases

Cases meet ATA spec 300, are water-proof but not watertight.

ATA Transport Containers

Provides a safe way to ship valuable equipment, such as electronic devices, personal computers, peripherals, cameras, and video equipment. Constructed of high-density polyethylene with a permanent white finish that withstands temperature variations of –180°F to 180°F, will not blister or peel, and is resistant to solvents. **Features:** Rubber gaskets to seal out dirt and moisture (not completely watertight); Male/female closures that can be padlocked; Quarter-turn, military-style latches; Full length, heavy-duty piano hinges (except on two-piece cases) and Convenient, strong handles. Choose a 2" Foam Lined which absorbs shock to provide extra protection and reduces movement of equipment during shipping. Your other choice is Full Foam with a 2" layered full-foam interior which is easily cut with an enclosed knife to fit your equipment's dimensions. Supports weight of 250 lbs. per square inch **(USA)**

Attache Style

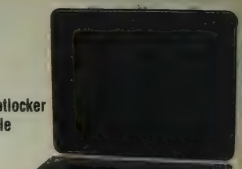
Oversized Shipping Rates Apply.

Attache Style – One Handle

Foam Lined	PRICE	Wt.	Foam Filled	PRICE	Wt.	Int. Dim. (LxWxH)	Bottom / Lid
227CA146	$175.00	11	227CA140	$195.00	11	17-3/4" x 14-1/2" x 6-3/8"	3-5/8" + 2-3/4"
227CA149	$199.00	13	227CA148	$209.00	14	17-3/4" x 14-1/2" x 9	5" + 4"
227CA414	$199.00	13	227CA412	$219.00	15	17-3/4" x 14-1/2" x 12"	8-1/2" + 3-1/2"
227CA811	$239.00	14	227CA810	$249.00	17	18-3/4" x 18-3/4" x 10"	6" + 4"
227CA813	$255.00	18	227CA318	$275.00	21	18-3/4" x 18-3/4" x 13"	9" + 4"

Factory Installed Wheeled Option
Now, select models of our transport containers are available with heavy-duty, ball-bearing wheel cassettes. These cassettes are field replaceable!

Foam Lined	PRICE	Wt.	Foam Filled	PRICE	Wt.	Int. Dim. (LxWxH)	Bottom / Lid	Wheeled Version: Foam Filled	PRICE	# WHEELS
227CA690	$305.00	24	227CA691	$319.00	27	27" x 19" x 12"	8" + 4"	227CA693	$345.00	2
227CA694	$309.00	25	227CA695	$339.00	29	27" x 19" x 14"	8" + 6"	227CA697	$355.00	2
227CA698	$319.00	26	227CA699	$359.00	31	27" x 19" x 16"	8" + 8"	227CA701	$365.00	2



Footlocker Style

Footlocker Style – Two Handles

Foam Lined	PRICE	Wt.	Foam Filled	PRICE	Wt.	Int. Dim. (LxWxH)	Bottom / Lid	Wheeled Version: Foam Filled	PRICE	# WHEELS
227CA217	$309.00	25	227CA817	$359.00	29	23-1/2" x 18-1/2" x 17-1/2"	14" + 3-1/2"	227CA717	$389.00	2
227CA214	$309.00	21	227CA114	$335.00	24	28-7/8" x 14-1/4" x 14"	11" + 3"	227CA703	$349.00	2
227CA216	$429.00	33	227CA116	$489.00	35	34" x 25-3/4" x 16"	13" + 3"	227CA716	$549.00	4
227CA280	$369.00	31	227CA281	$399.00	35	35-1/2" x 18" x 15"	10" + 5"	227CA781	$439.00	2
227CA019	$419.00	40	227CA119	$499.00	46	37" x 22" x 19"	14" + 5"	227CA719	$509.00	4
227CA286	$399.00	37	227CA284	$445.00	40	38" x 22" x 12"	10" + 2"	227CA784	$479.00	4

Square Box Style

Best Seller

Square Box Style – Two Handles

Foam Lined	PRICE	Wt.	Foam Filled	PRICE	Wt.	Int. Dim. (LxWxH)	Bottom / Lid	Wheeled Version: Foam Filled	PRICE	# WHEELS
227CA143	$229.00	11	227CA142	$239.00	11	14-1/2" x 13-1/8" x 12"	10" + 2"	–	–	–
227CA213	$235.00	15	227CA113	$249.00	16	15-3/4" x 14-3/4" x 13-1/2"	6-3/4" + 6-3/4"	–	–	–
227CA218	$299.00	21	227CA818	$329.00	25	18-3/4" x 18-3/4" x 18"	14" + 4"	–	–	–
227CA255	$375.00	25	227CA254	$399.00	30	22" x 22" x 17-1/2"	10-1/2" + 7"	227CA754	$429.00	2
227CA257	$379.00	31	227CA256	$419.00	36	22" x 22" x 21"	10-1/2" + 10-1/2"	227CA756	$439.00	2
227CA417	$369.00	32	227CA117	$399.00	37	24" x 24" x 17-1/2"	15" + 2-1/2"	227CA718	$469.00	4
227CA421	$389.00	33	227CA121	$429.00	40	24" x 24" x 21-3/4"	15" + 6-3/4"	227CA721	$479.00	4
227CA273	$419.00	37	227CA272	$429.00	46	26-1/2" x 26-1/2" x 20"	12" + 8"	227CA772	$539.00	4
227CA226	$459.00	41	227CA126	$549.00	54	26-1/2" x 26-1/2" x 26"	13" + 13"	227CA726	$559.00	4

Additional Sizes & Foam Lined Wheeled Cases Available. Call for Details.

platt

ATA Cases with Recessed Hardware

All hardware is recessed to resist damage during shipping. The exterior shell is tough impact resistant HMW polyethylene. Heavy-duty aluminum valance and gasket, combination lock, twist-down latches, full-length piano hinge and spring loaded handle. Filled with layers of cubed foam and a flat cushion in the bottom and convoluted cushion in the lid.

JUST THE FACTS				
Techni-Tool No.	Model Number	Inside Dimensions (L x W x D)	Wheels & Handle	PRICE
658CA221	221609AH	21-1/2" x 15-1/2" x 9"	Yes	$383.35
658CA181	241811AH	23-3/4" x 17-3/4" x 11"	Yes	$418.63
658CA2316	252316AH	25-1/4" x 23-1/4" x 16"	Yes	$522.33
658CA201	282011AH	27-1/2" x 19-1/2" x 11"	Yes	$453.05
658CA3222	322211AH	31-3/4" x 22" x 11"	Yes	$486.20
658CA309	181309A	18"L x 13"W x 9"D	No	$246.50
658CA409	201409A	20"L x 14"W x 9"D	No	$258.83

CHEllis

New!

ATA Wheeled Foam-Filled Cases

Rotationally molded dense polyethylene with impact-resistant corners. Telescoping handle extends 42" and locks in up and down positions. Four wheels on wide wheel base makes rolling easy. Black powder-coated finish and grooved valance resists scratches; full length piano hinge; positive-action lid stays for safety; spring-loaded handle, quarter-turn recessed latches, padlock loop. 2" foam-lined on all sides. 21" x 16.38" with 4" lid. Black.

No. 336CA909 10" base.....**$444.00**
No. 336CA910 12" base.....**$464.00**
No. 336CA911 14" base.....**$480.00**
No. 336CA912 16" base.....**$492.00**
No. 336CA913 18" base.....**$509.00**

TECHNI-TOOL Tomorrow's Products Shipped Today
Phone: 1-800-832-4866 or 1-610-941-2400

BUILT TO PERFORM IN THE MOST SEVERE CONDITIONS:

• Unbreakable • Watertight • Airtight • Dustproof • Chemical Resistant • Corrosion Proof • Lifetime Guarantee

All Pelican™ cases are constructed of lightweight space-age structural resin with neoprene o-ring and exclusive purge valves. **All Include:** locking flanges, massive multiple catches for absolute security and a comfortable molded fold-down handle. Half inch Pick 'N Pluck™ foam (included in all models unless otherwise noted) protects against impact, vibration or shock and allows you to customize the interior. Trace out the item you want in the case and simply pluck the foam out by hand, no tools required. Padded dividers available in some cases. Some also available in Blue, Dark Grey, Desert Tan, Olive Drab, Green, Orange, Red, Silver, White, Yellow - call for availability.

iPod Player Case

Protect your iPod®, Nano, and Shuffle™ player. Lid organizer stores earphones when not in use. Double end tie-down strap keeps player secure while involved in sports activities. Easy open latch and custom rubber liner doubles as o-ring seal to repel moisture. *Molded-In foam.

TT No.	Model/Color	Inside Dimensions (LxWxD)	Outside Dimension (LxWxD)	Lid Depth	PRICE
603CA1010IBK	I1010/Black	4.37" x 2.87" x 1.68"	5.43" x 4.06" x 2.12"	0.69"	$26.75
603CA1010IWT	I1010/White				$26.75

Micro Cases

Ideal for protecting your cell phone, camera, Personal Digital Assistants (PDA), pager, radio, and other valuable small items. Includes ring and a lanyard for easy attachment.

TT No.	Model/Color	Inside Dimensions (LxWxD)	Outside Dimension (LxWxD)	Lid Depth	PRICE
603CA1010BK	1010/Black	4.37" x 2.87" x 1.68"	5.43" x 4.06" x 2.12"	0.69"	$11.47
603CA1020BK	1020/Black	5.31" x 3.56" x 1.68"	6.37" x 4.75" x 2.12"	0.69"	$15.31
603CA1030BK	1030/Black	6.37" x 2.62" x 2.06"	7.50" x 3.87" x 2.43"	0.69"	$16.06
603CA1040BK	1040/Black	6.50" x 3.87" x 1.75"	7.50" x 5.06" x 2.12"	0.69"	$17.24
603CA1050BK	1050/Black	6.31" x 3.68" x 2.75"	7.50" x 5.06" x 3.12"	0.69"	$19.45
603CA1060BK	1060/Black	8.25" x 4.25" x 2.25"	9.37" x 5.56" x 2.62"	0.69"	$21.83

Laptop Cases

*Molded plush foam liner protects from impact shock and won't scratch your notebook.
Includes extra foam pads for thinner notebooks.

1080

1495

1490

TT No.	Model/Color	Inside Dimensions (LxWxD)	Outside Dimension (LxWxD)	Lid Depth	Fits Laptops	PRICE
603CA1080	1080/Dark Grey	12.80" x 9.80" x 1.70"	13.75" x 10.95" x 2.55"	0.85"	13"	$78.80
603CA1090	1090/Black	15.00" x 11.32" x 1.92"	15.83" x 13.10" x 2.86"	0.96"	14.4"	$107.10
603CA1470BK	1470/Black	15.62" x 10.43" x 3.75"	16.68" x 13.06" x 4.37"	1.37"	13"	$122.38
603CA1490BK	1490/Black	17.75" x 11.37" x 4.12"	19.87" x 13.93" x 4.68"	1.50"	14"	$145.34
603CA1495BK	1495/Black	18.87" x 13.12" x 3.81"	21.62" x 17.25" x 4.87"	1.12"	17"	$174.92

Small Cases

NATO codified and tested to MIL C-4150J (Military Standard), IP-67 and ATA .

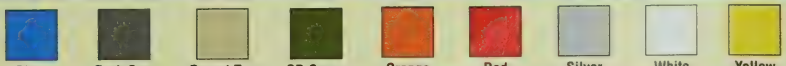
1120

1300

1400

TT No.	Model/Color	Inside Dimensions (LxWxD)	Outside Dimension (LxWxD)	Lid Depth	PRICE
603CA200BK	1120/Black	7.25" x 4.75" x 3.06"	8.12" x 6.56" x 3.56"	0.50"	$28.32
603CA200SI	1120/Silver				$28.32
603CA200Y	1120/Yellow				$28.32
603CA205BK	1150/Black	8.18" x 5.68" x 3.62"	9.12" x 7.56" x 4.37"	0.75"	$32.88
603CA205OR	1150/Orange				$32.88
603CA205SI	1150/Silver				$32.88
603CA205Y	1150/Yellow				$32.88
603CA210BK	1200/Black	9.25" x 7.12" x 4.12"	10.62" x 9.68" x 4.87"	1.18"	$45.89
603CA210OR	1200/Orange				$45.89
603CA210SI	1200/Silver				$45.89
603CA215BK	1300/Black	9.87" x 7.00" x 6.12"	10.62" x 9.68" x 6.87"	1.18"	$54.65
603CA215OR	1300/Orange				$54.67
603CA215SI	1300/Silver				$54.67
603CA215Y	1300/Yellow				$54.67
603CA220BK	1400/Black	11.81" x 8.87" x 5.18"	13.37" x 11.62" x 6.00"	1.18"	$83.78
603CA220OR	1400/Orange				$83.78
603CA220SI	1400/Silver				$83.78
603CA220Y	1400/Yellow				$83.78

Some Pelican™ cases also available in the following colors - Call for Availability!



Blue | Dark Grey | Desert Tan | OD Green | Orange | Red | Silver | White | Yellow

***Color swatches shown for representation, color tint may vary.**

PELICAN

Medium Cases

Top Loader

Easy open double throw latches and flip lid gives you fast access to your gear. Features a fold-down rubber over-molded handle for comfort and steel reinforced lock hasp protector. Smooth rolling, quiet polyurethane wheels and a retractable handle also available. Ideal for field tool kits.

TT No.	Model/Color	Inside Dimensions (LxWxD)	Outside Dimension (LxWxD	Lid Depth	Wheels & Retractable Handle	PRICE
603CA1430BK	1430/Black	13.56" x 5.76" x 11.70"	16.93" X 9.61" X 13.42"	2.00"	N	$90.96
603CA1440BK	1440/Black	17.10" x 7.50" x 16.00"	19.70" x 12.00" x 18.00"	2.00"	Y	$180.50
603CA225BK	1450/Black	14.62" x 10.18" x 6.00"	16.00" x 13.00" x 6.87"	1.75"	N	$107.10
603CA225Y	1450/Yellow					$107.10

Attaché Cases

Toughest and biggest FAA approved airline-legal carry-on case available. Complete with side handle, front handle and/or convenient extension handle, it is the perfect rolling travel companion.

TT No.	Model/Color	Inside Dimensions (LxWxD)	Outside Dimension (LxWxD	Lid Depth	Wheels & Retractable Handle	PRICE
603CA230BK	1500/Black	16.75" x 11.18" x 6.12"	18.50" x 14.06" x 6.93"	1.81"	N	$124.70
603CA230OR	1500/Orange					$124.70
603CA230SI	1500/Silver					$131.95
603CA1510BK	1510/Black	19.75" x 11.00 x 7.60"	22.00" x 13.81" x 9.00"	1.79"	Y	$177.46
603CA235BK	1520/Black	17.87" x 12.75" x 6.75"	19.12" x 15.43" x 7.56"	1.81"	N	$136.11
603CA235SI	1520/Silver					$136.11
603CA240BK	1550/Black	18.43" x 14.00" x 7.62"	20.62" x 16.87" x 8.12"	1.75"	N	$154.53
603CA240SI	1550/Silver					$154.53
603CA240Y	1550/Yellow					$154.53

FAA maximum carry on size!

Laptop Overnight Case

New!

TT No.	Model/Color	Inside Dimensions (LxWxD)	Outside Dimension (LxWxD	Lid Depth	Wheels & Retractable Handle	PRICE
603CA1512	1510L/Black	19.75" x 11.00" x 7.60"	22.00" x 13.81" x 9.00"	1.79"	Y	$292.95

Big Cases

Attaché Cases

Complete with both front handle and convenient extension handle, these are perfect rolling travel companion. Padlock protectors provide added strength and security against cutting and theft. Black.

TT No.	Model/Color	Inside Dimensions (LxWxD)	Outside Dimension (LxWxD	Lid Depth	Wheels & Retractable Handle	PRICE
603CA1560BK	1560/Black	20.37" x 15.43" x 9.00"	22.06" x 17.93" x 10.43"	2.00"	Y	$189.72
603CA245BK	1600/Black	21.43" x 16.50" x 7.87"	24.25" x 19.43" x 8.68"	1.75"	N	$182.06
603CA245OR	1600/Orange					$182.06
603CA245SI	1600/Silver					$182.06
603CA1610	1610/Black	21.68" x 16.62" x 10.56"	24.71" x 19.58" x 11.93"	2.06"	Wheels	$235.58
603CA620	1620/Black	21.37" x 16.37" x 12.56"	24.81" x 19.37" x 13.87"	2.06"	Y	$256.25
603CA1640BK	1640/Black	23.70" x 24.00" x 13.90"	27.20" x 27.50" x 16.30"	2.00"	Y	$287.63
603CA0650	1650/Black	28.50" x 17.37" x 10.50"	30.75" x 20.50" x 11.62"	1.87"	Y	$266.20
603CA1660	1660/Black	28.18" x 19.75" x 17.62"	31.50" x 22.87" x 19.00"	3.50"	Y	$351.88

Rifle Case

Long firearms include transport wheels for better handling.

TT No.	Model/Color	Inside Dimensions (LxWxD)	Outside Dimension (LxWxD)	Lid Depth	Wheels & Retractable Handle	PRICE
603CA1700	1700/Black	35.75" x 13.50" x 5.25"	38.12" x 16.00" x 6.12"	1.75"	Wheels	$214.19
603CA1720	1720/Black	42.00" x 13.50" x 5.25"	44.37" x 16.00" x 6.12"	1.75"	Wheels	$239.45
603CA1750	1750/Black	50.50" x 13.50" x 5.25"	53.00" x 16.00" x 6.12"	1.75"	Wheels	$253.22

PELICAN

Space-Saving Stackable Transport Case

New!

From the loading dock to the final destination, this rugged case does the job. Stainless steel ball bearing wheels and a fold-down handle turn big loads into a one-man job. For multiple cases, heavy cleats lock a stack together as one secure load.
Features: Automatic pressure equalization valve, Watertight, crushproof and dust proof.
34" x 24" x 12.5" I.D.
No. 603CA1730.....$445.50

PELICAN

Cube Cases

Perfect for moving specialty items, Cube Cases are extra deep and layered with foam. Gorilla-sized handles provide a double hand hold on each side to control moving those heavy loads. Interlocking slots let you stack cubes to make a tower. Available in three sizes that meet almost any application.

0350

0370

TT No.	Model/Color	Inside Dimensions (LxWxD)	Outside Dimension (LxWxD)	Lid	Wheels & Handles	PRICE
603CA0340	0340/Black	18.00" x 18.00" x 18.00"	20.50" x 20.50" x 19.25"	4.00"	Y	$313.63
603CA0350	0350/Black	20" x 20" x 20"	22.50" x 22.43" x 21.25"	5.00"	Optional wheels	$319.75
603CA0370	0370/Black	24" x 24" x 24"	26.50" x 26.50" x 25.25"	4.50"	Optional wheels	$384.79

TEC-TUFF

Ship-Carry® Case Full Foam

Best Seller

2" layered foam accepts weights up to 250 Lbs./Sq. In.; Cutting knife included.
17-3/4"L x 14-1/2"W case comes in five heights. **(USA)**

Description	Qty.	6-1/2"H Black 227CA640	6-1/2"H Granite 227CA641	7-3/4"H Black 227CA642	7-3/4"H Granite 227CA643	9"H Granite 227CA645	10-3/4"H Black 227CA646
Ship-Carry® Case Full Foam	1-3	$165.00	$165.00	$165.00	$165.00	$175.00	$179.00
	4-9	$157.58	$157.58	$157.58	$157.58	$167.13	$170.95
	10+	$150.15	$150.15	$150.15	$150.15	$159.25	$162.89

Ellis

Blow-Molded Cases

Economical "do-it-yourself" cases. Prime high-density polyethylene double wall construction. The textured exterior resists dents, cracking, scuffs and will remain unaffected by extreme temperatures. Durable field replaceable mechanical latches with a mechanical hinge system outlasts the "living-hinge" style found on most similar style cases. All foam-filled cases are filled with layers of cubed foam, flat cushion in the bottom and convoluted and/or flat cushion in the lid. (336CA207 has flat cushion in lid only)

JUST THE FACTS				
TT No.	Model No.	Inside Dimensions (L x W x D)	Body Depth	PRICE
336CA207	207	9.5" x 6" x 2.69"	2"	$17.50
336CA703	307	11" x 7" x 3.43"	2"	$19.95
336CA074	407	12.4" x 8.9" x 5.15"	3"	$32.40
336CA506	507	13.5" x 9.9" x 4.03"	3"	$32.40
336CA607	607	15.9" x 10.9" x 2.9"	2"	$35.55
336CA707	706	17.9" x 12.7" x 5.77"	4"	$66.15

platt

Economy Cases

Black molded ABS shell. Drawbolt key locks, latches and molded handle. Foam filled with bottom foam precut into removable cubes. Other sizes available. **(USA)**

Medium-duty valance.

JUST THE FACTS				
TT No.	Model No.	Inside Dimensions (L x W x D)	Body Depth	PRICE
658CA1414	1414	12" x 11" x 5"	3"	$70.55
658CA1416	1416	16" x 12" x 5"	3"	$78.20
658CA426	1426	16" x 12" x 7"	4"	$92.23
658CA1425	1425	18" x 13" x 7"	4"	$112.63
658CA910	2007	20" x 14" x 7"	4"	$148.75
658CA220	2207	22" x 16" x 7"	4"	$170.00
658CA407	2407	24" x 18" x 7"	4"	$193.38
658CA2807	2807	28" x 20" x 7"	4"	$215.48

TECHNI-TOOL®
Tomorrow's Products ▶ Shipped Today

50 years 1959 • 2009

Pre-built & Custom TOOL KITS

We've been making tool kits for over 45 years, and experience has taught us what combinations of tools work best for what applications. We put that knowledge into every pre-built tool kit we offer. But we've also learned that customers like you sometimes have unique needs and preferences that require different solutions. So we also offer the easiest custom tool kit program in the business.

Choose a Pre-Built tool kit or let us Customize one to fit your exact needs

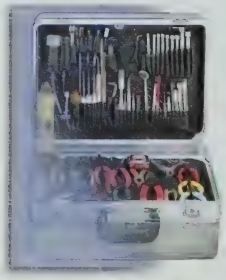
Our PICK-A-KIT off-the-shelf tool kits are the simplest option.

We build 86 different kits and keep them in inventory, all stocked with tools from leading manufacturers including Xcelite, Crescent, Weller, General Tools, Moody Tools, Bondhus and more. And many of our kits also include high-quality, economically-priced Techni-Tool brand hand tools that stretch your budget dollars and give you more kit for the money.

Our DESIGN-A-KIT program lets you create a customized tool kit to fit your budget and needs.

Whether you want a pre-built kit with just a few tool changes, or a completely new kit from scratch, our tool kit team will make the process fast and easy.

First call us with your list of tools and preferred manufacturers. If you're looking to keep prices as low as possible, ask us to spec in as many Techni-Tool brand products as possible. If you're not sure what you want, our tool experts can walk you through the process and suggest options and alternatives.



Next tell us your case preferences – hard or soft? … wheely or attaché? …and we'll select the right pallets and case, lay out the tool kit, and quote you a cost. We assemble all our kits by hand in our state-of-the-art warehouse using the strictest quality control procedures.

Once your Design-A-Kit is completed, we can produce one kit or a thousand any time you need it. So you can outfit your organization anywhere in the world with the same high-quality custom designed kits. And you can order replacement tools or additional kits anytime with just one phone call.

Exclusive Tec-Tuff Cases Are Engineered to Last

Tec-Tuff cases are made from specially-engineered, high-density polyethylene and are heat-molded under pressure so the case won't sag in the center or punch through at the corners or feet.

THEN WE ADD:

- An extra-wide aluminum valance deep-set to prevent separating during use. Our valance is the strongest in the industry!

- A full-length piano hinge with ball-bearing locking lid stays to keep the lid open even when loaded with tools

- Rigid, molded-in feet for added stability and durability

- Extra-wide, rigid top and bottom pallets for additional tool support. All pallets are hand-sewn and neatly finished

- Two heavy-duty locking latches keep your tools secure

Phone: 1-800-832-4866
or 1-610-941-2400

Best Seller

TECHNI-TOOL EXCLUSIVE

147 PIECES

TEC-TUFF

9452/9454 Electronic Service Master Tool Kit

- *Industry approved tools and equipment*
- *Rugged case and pallets for the toughest jobs*

Servicing today's electronic equipment encompasses a variety of tasks that requires a range of tools from basic screwdrivers to complex test equipment. From our years of experience working with technicians, we've compiled a set of tools commonly requested and required to help you complete these tasks easily and safely. In addition, we've fit these tools into two removable pallets housed in a rugged rotationally molded polyethylene case with a wide padded handle for carrying comfort, and keyed draw bolt latches for maximum security. The textured black case measures 17-3/4"L x 14-1/2"W x 9"D (I.D.). The bottom of the case is 5" deep and is ideal for housing test equipment and parts boxes. The 4" deep lid has a full-length, reinforced document pouch for holding manuals or other paperwork.

SAVE $60 OVER on the Gray Kit & Case until 6/30/09

Black

Gray

Tec-Tuff® Black Electronic Service Master Tool Kit
No. 9452 .....$711.45

Tec-Tuff® Black Case & Pallets Only
No. 758CA9432 .....$191.40

Tec-Tuff® Gray Electronic Service Master Tool Kit
No. 9454 .....~~$711.45~~ SALE $644.34

Tec-Tuff® Gray Case & Pallets
No. 758CA454.....~~$274.25~~ SALE $156.54

What's Inside the 9452/9454 Electronic Service Master Tool Kit...

- Batteries, AA (2)
- Blade, #1: 5/pk
- Brush, Bristle Cleaning
- Brush, Solder
- Burnisher, Contact
- Extension, 4"
- File Set - 3 pc., Assorted
- Flashlight, Penlight, 2 Cell
- Gauge, Feeler
- Hacksaw, Mini: 8-3/4" OAL
- Hammer, Ball Pein: 4 oz.
- Handle, Regular
- Hemostat, Straight
- Key Cap Remover
- Knife, #1
- Knife, Electrician's
- L-Wrench Balldriver Set - 12 pc.: .050 - 5/16"
- L-Wrench Balldriver Set - 6 pc.: 1.5 - 5mm
- Mirror
- Nutdriver Set, Midget: 3mm-10mm 11 pc.
- Nutdrivers: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2" Hex
- Nutstarter, #4 to #40
- Oiler
- Plier w/Cutter, Long Chain Nose
- Plier, Diagonal Oval Head
- Plier, Diagonal Tapered, 4"
- Plier, Locking
- Plier, Long Chain Nose
- Plier, Snap Ring-Internal/External
- Pliers, Groove Joint, 7" & 10"
- Probe, Communication
- Punch, Center, 3/32"
- Retrieving Tool, Magnetic
- Rule
- Scissor, Electrician's
- Screwdriver Blade, Slotted: 5/16"
- Screwdriver Set, Offset Ratchet - 5 pc.
- Screwdriver Set, Slotted - 7 pc.: .025" - .100"
- Screwdrivers, Phillips: Mechanics,#0, #0 w/Pocket Clip, #1, #2 (1/4" x 4"), (1/4" x 1-5/16")
- Screwdrivers, Slotted: 1/4" Stubby, 1/8" x 3", 3/16" x 3", 3/32" x 2", 5/16" x 6"
- Screwstarter, Double End: Slotted/Phillips
- Screwstarter, Quickwedge: 3/16" Blade, 6-1/2" OAL
- Scribe, Machinist's
- Socket Set, 1/4" Drive - 14 pc.
- Solder Aid Tool: Angled
- Reamer & Forked
- Solder Removal Tool
- Solder Wick
- Solder, Pocket-Pak
- Soldering Iron, 25W
- Spring Hook, Pull & Lift
- Stripper Tool, 5-in-1
- Stripper w/Cutter, Wire
- Torx Screwstarters: T-10, T-15, T-20, T-25, T-27, T-30
- Tweezers, Self-locking
- Wrench Set, Ignition - 8 pc. 7/32" - 7/16" w/Pouch
- Wrench Set, Torx- 7 pc.
- Wrenches, Adjustable, 4" & 6"

Add this to your tool kit...

Metric Add-On/Upgrade Kit - 53 pc

This kit contains the following 53 pieces:

- Short Arm Metric Hex Set, 0.7mm – 10mm (12 pc)
- Metric Ignition Wrench Set (8 pc)
- 1/4" Drive Metric Socket Set, 4mm – 12mm (14 pc)
- Metric Combo Wrench Set (7 pc)
- Metric Nut Driver 4mm – 11mm (9 pc)
- Nut Driver Handle
- 150mm Stainless Steel Ruler w/Pocket Clip
- 25 Blade Metric Thickness Gauge

No. 7611.....$186.50

Shown with Granite Case

Built for the long haul! WHEELY™ CASE

Engineered for the field service technician. Our Tec-Tuff® Wheely™ case design is rugged enough to securely hold your tools, while protecting your sensitive test instruments.

Our Tec-Tuff® Wheely™ case is a high-density, rotationally-molded polyethylene to give you a case that won't sag in the center or punch through at the corners.

The case features: a heavy-gauge, aluminum valance; four 2" replaceable, built-in, cassette-type sealed ball bearing wheels; full-length piano hinge; quick-release metal telescoping handle that locks into place in extended or closed positions; two keyed Franzen latches; three tumbler combination lock; comfort padded handle; three-pallet deep case construction; and document pocket in lid.

Plus, Tec-Tuff® Wheely™ cases are warranted against defects in materials and workmanship for three full years on the case shell, or we will replace it; tool pallets have a full one-year warranty; latches or handles have a one-year warranty - all from date of purchase. Like any product, your Tec-Tuff® Wheely™ is not indestructible. Our warranty does not cover damage that may result from abuse, or normal use.

Best Seller

TEC-TUFF 9434/9898

Deluxe Electronics Engineer Wheely™ Kit

The tools in this kit have been specially assembled to help you work with a wide range of MRO applications. Your complete tool kit with swing-out pallets and the tool assortment *(shown below)*. 17-3/4"L x 14-1/2"W x 9"D. (I.D.) Case stands 41" with handle extended.

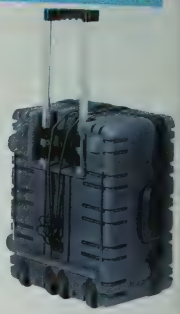
Tec-Tuff® Black
Deluxe Electronics Engineer Wheely™ Kit
No. 9898 9" Tool Kit **$814.35**

Tec-Tuff® Case & Pallets Only
Accommodates the tools listed or similar:
No. 758CA9834 9" Wheely Case **$350.00**

Tec-Tuff® Granite
Deluxe Electronics Engineer Wheely™ Kit
No. 9434 9" Tool Kit **$814.35**

Tec-Tuff® Case & Pallets Only
Accommodates the tools listed or similar:
No. 758CA9434 9" Wheely Case **$350.00**

Black Case



Granite Case

What's Inside the 9434/9898...

- AA Batteries (2)
- Brush, Bristle Cleaning
- Brush, Solder
- Center Punch, 3/32"
- Contact Burnisher
- Extension, 4"
- File Set - Assorted 3 pc.
- Flashlight, Penlight
- Gauge, Feeler
- Hacksaw, Mini
- Hammer, Ball Pein
- Handle, Regular
- Hemostat, Straight
- Key Cap Remover
- Knife, #1 w/Safety Cap
- Knife, Electrician's
- L-Wrench Baildriver Set - 6 pc.: 1.5 - 5mm
- L-Wrench Baildriver Set - 12 pc.: .050" - 51/16"
- Mirror
- Nutdriver Blades: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"
- Nutdriver Set -11 pc.: 3-10mm
- Nutstarter, 5/16" 4-40
- Oiler
- Pliers w/Cutters, Long Nose, Serrated
- Pliers, Diagonal
- Pliers, Diagonal, Oval Head
- Pliers, Diagonal, Tapered
- Pliers, Groove Joint Locking, 7" & 10"
- Pliers, Long Nose, Serrated
- Pliers, Snap Ring-Internal/External
- Probe, Communication
- Retrieving Tool
- Rule
- Scissor, Electrician's
- Screwdriver Blade: Slotted, 5/16"
- Screwdriver Set, Offset Ratchet - 5 pc.: Mechanics, Phillips #0 w/Pocket Clip, Phillips #0, #1, #2, #2-Stubby
- Screwdriver, Slotted 1/4" Stubby
- Screwdrivers, Slotted Set - 7 pc. .025"-.100"
- Screwdrivers, Slotted 3/32" x 2", 1/8" x 3", 3/16" x 3", 5/16" x 6" Blade
- Screwstarter: Quickwedge Double End Slotted & Phillips 3/16" Blade, 6-1/2" OAL,
- Scribe, Machinist's 2 Point
- Socket Set - 14 pc., 1/4" Drive
- Solder Aid Tool: Angled Reamer & Forked
- Solder Removal Tool
- Solder Wick
- Solder, 60/40 Pocket-Pak
- Soldering Iron, 25W
- Spring Hook, Pull & Lift
- Stripper Tool, 5-In-1
- Stripper w/Cutter, wire
- Torx, Fold-Up, T-6 to T-20
- Torx: T-10, T-15, T-20, T-25, T-27, T-30
- Tweezers, Self Locking
- Wrench Set , Ignition - 8 pcs.: 7/32" - 7/16"
- Wrenches, Adjustable, 4" & 6"

TEC-TUFF

TECHNI-TOOL EXCLUSIVE

Deluxe Electronic Service Tool Kit

More in-depth service and maintenance tasks require a larger tool assortment – like the selection you find in the Deluxe Electronic Service tool kit. But with added tools, do you need to worry about lugging around a heavy case? Not with our kits – we select as many multipurpose tools as we can so your case is lighter and more space-efficient. And our popular attache-style case travels to all your work locations with ease. **The Tec-Tuff® Attache Case:** Featuring the strongest Valance in the industry offered in Silver of Blue. Dims: 18-1/2"L x 13-1/2"W x 8"D

Tec-Tuff® Attache Deluxe Electronic Service Tool Kit

No. 758TK354 8" Tool Kit (Black with Blue Valance) **$610.10**

No. 758TK355 8" Tool Kit (Black with Silver Valance) **$610.10**

Tec-Tuff® Case & Pallets Only *Accommodates the tools listed or similar:*

No. 758CA354 8" Case (Black with Blue Valance) **$152.65**

No. 758CA355 8" Case (Black with Silver Valance) **$144.00**

TECHNI-TOOL EXCLUSIVE
Strongest Valance in the Industry!

What's Inside the Deluxe ES Kit...

- Alignment Kit - 2 pc
- Awl, Scratch
- Brush, Solder
- Burnishers, Contact -3 pc
- Flashlight (AA)
- Gauge, Thickness: 0015" - .025"
- Hammer, Ball Pein: 4 oz.
- Handle
- Hex Key Set, 9 pc Fold-Up
- Holder, Straight Lock
- Inserter, Dip
- Knife
- Knife, Electrician's with Screwdriver
- Magnifier, 2.5X in Leather Case
- Mirror, Pocket
- Nutdriver Blades: 11/32" Hex, 7/16" Hex, 7/32" Hex
- Nutdriver Blades: 5/16" Hex, 3/8" Hex, 1/2" Hex, 3/16" Hex, 1/4" Hex, 9/32" Hex
- Oiler, Needle Point w/Lubricant
- Parts Box, Large
- Parts Box, Medium
- Plier w/Cutter, Long Nose, 5-1/2"
- Plier, Groove Joint, 1-1/8"
- Plier, Midget Diagonal, 4"
- Plier/Cutter, Diagonal, Semi-Flush Cut, Slim
- Pliers, Retaining Ring
- Pliers, Tongue and Groove, 10"
- Potentiometer Trimmer, Mini
- Punch, Center, Solid
- Punch, Pin, 1/8"
- Punch, Pin, Drive, 1/16"
- Reamer and Scraper
- Rule, Stainless Steel, 6"
- Scissors, Electricians'
- Screw Holder, 3/16"
- Screwdriver Blade, Phillips #0: 1/8" dia. 2" Blade
- Screwdriver Blade: Phillips #1
- Screwdriver Blades: Phillips #2, 1/4"
- Slotted 4" Interchangeable Extension
- Screwdriver Blades: Slotted 3/16",1/8"
- Screwdriver Set - 6 pc Slotted/Cross Recess
- Screwdriver, Phillips #2 Stubby: 1/4" dia. 1-5/16" Blade
- Screwdriver, Slotted Pocket: 3/32" dia. 2" Blade
- Screwdriver, Square Stubby: 1/4" dia. 1-1/4" Blade
- Screwdrivers, Round Blade: 1/8" dia. 8" Blade; 5/16" dia. 6" Blade; 5/32" dia. 4" Blade
- Socket Set, 1/4" Drive - 4 pc
- Solder Pocket Pack
- Solder Wick
- Soldering Iron, 25W
- Spring Hook, Pull and Lifter
- Stripper w/Wire Cutter
- Stripper, 5-in-1
- Torx Wrench Set, 7 pc Fold-Up
- Tweezer , Filament Holder
- Wrench Set, Open-end Ignition - 8 pc
- Wrench, Adjustable, 4"
- Wrench, Adjustable, 8"

DELUXE
Electronic Service

123 PIECES

TEC-TUFF Master

TECHNI-TOOL EXCLUSIVE

Electronic Service Tool Kits

Our Master Electronic Tool Kits feature a comprehensive selection of tools to accomplish almost any job you come across in the field. For the ultimate selection, choose the Inch/Metric kit – all the tools you need, in both inch and metric varieties. All four Master kits include wheeled cases with telescoping handle for excellent maneuverability, plus: rubber with ball bearing wheels; padded steel core handle; plated steel knob protectors; and a wide wheel base for stability.
Dims: 17-3/4"L x 14-1/2"W x 10"D.

Tec-Tuff® Wheeled

Master Electronic Service Tool Kit - 136 Pcs (Not Shown)

No. 758TK356 10" Tool Kit (Black with Blue Valance) **$835.80**

No. 758TK357 10" Tool Kit (Black with Silver Valance) **$835.80**

Tec-Tuff® Case & Pallets Only *Accommodates the tools listed or similar:*

No. 758CA356 8" Case (Black with Blue Valance) **$312.80**

No. 758CA357 8" Case (Black with Silver Valance) **$312.80**

Inch/Metric Master Electronic Service Tool Kit - 136 Pcs (Shown)

No. 758TK358 10" Tool Kit (Black with Blue Valance) **$1,434.83**

No. 758TK359 10" Tool Kit (Black with Silver Valance) **$1,434.83**

Tec-Tuff® Case & Pallets Only *Accommodates the tools listed or similar:*

No. 758CA358 10" Case (Black with Blue Valance) **$337.80**

No. 758CA359 10" Case (Black with Silver Valance) **$337.80**

Best Seller

191 PIECES

INCH/METRIC MASTER
Electronic Service

What's Inside the Master ES Kit...

- **All items included in the Deluxe Electronic Service Tool Kit, plus:**
- Brush, Nylon Bristle
- File Set, Needle, 3 pc
- Keycap Puller
- Nutstarter
- Pickup Tool, Magnetic
- Soldapullt, Low Static
- Torx Driver Blades, Interchangeable: #6, #8, #10, #15, #20, #25
- Wash Bottle, 2 oz.

Note: Does not include 3/16" Screw Holder

What's Inside the Inch/Metric Master ES Kit...

- **All items included in Deluxe Electronic Service Tool Kit, plus:**
- Brush, Nylon Bristle
- Dip Clip, 16-pin
- File Set, Needle - 3 pc
- Hex Set, Metric, Fold-up, 7-Key
- Multimeter, Digital, Pen/Logic
- Multi-Service Tool, 6-in-1
- Nutdriver Blades: 4mm, 4.5mm, 5 mm, 5.5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm
- Nutstarter
- Pickup Tool, Magnetic
- Puller, Keycap
- Ratchet Set, Inch/Metric - 50 pc
- Screwdriver, Slotted Offset: #2-#6
- Soldapullt, Low Static
- Static Kit, Field Service - 4 pc
- Tape Measure, Metric/Inch, 3M/10'
- Torx Driver Blades, Interchangeable: #6, #8, #10, #15, #20, #25
- Wash Bottle, 2 oz.
- Wrench Set, Open End, Metric - 8 pc

Note: Does not include 3/16" Screw Holder and the 14 pc 1/4" Drive Socket Set

OUR MOST POPULAR KIT AVAILABLE IN TWO GREAT CASES! YOU CHOOSE!

Best Seller

TEC-TUFF 9408/9416/2008

Premium Electronic Technician Tool Kits

We've taken our most popular electronic field service kit, 117 of our most requested tools to service and repair electronic equipment and placed them at your fingertips in two specially engineered, professional tool cases.

Select our new Techni-Tool®

A. Model 2008

Electronic Technician Tool Kit, housed in our Roto-Rugged®, rotationally molded, dense polyethylene case — a special process that assures thick, impact-resistant corners. This professional tool case features a hand-fitted, tongue and groove aluminum valance with a baked-on powdered-coat finish to resist scratching; ball-bearing lid stays; a full-length piano hinge; a comfort, steel-core padded handle; combination lock, and more.

Dims: 2008: 17-3/4"L x 12-5/8"W x 6-1/8"D (I.D.)

Tec-Tuff® Black
Premium Electronic Technician Tool Kit
No. 2008 6/1/8" Tool Kit **$547.95**
Tec-Tuff® Case & Pallets Only
No. 758CA008 6/1/8"" Case **$203.10**

or Choose the original Techni-Tool®

B. Models 9408 and 9416

Electronic Technician Tool Kit, housed in our high-density, structural polyethylene Tec-Tuff® I-Beam™ case with an extra wide top and side pallet supports to prevent pallet-sag; a re-enforced anodized aluminum valance for extra durability; a comfort grip, steel-core padded handle, and more.

Dims: 9408: 17-3/4"L x 12-1/2"W x 5"D (I.D.)
9416: 17-3/4"L x 12-1/2"W x 7"D (I.D.)

Tec-Tuff® Black
Premium Electronic Technician Tool Kit
No. 9408 5" Tool Kit **$519.20**
No. 9416 7" Tool Kit **$520.95**
Tec-Tuff® Case & Pallets Only
No. 758CA9408 5" Case **$162.65**
No. 758CA9403 7" Case **$175.95**

Add this to your tool kit...

Metric Add-On/ Upgrade Kit - 53 pc

This kit contains the following 53 pieces:

- Short Arm Metric Hex Set, 0.7mm – 10mm (12 pc)
- Metric Ignition Wrench Set (8 pc)
- 1/4" Drive Metric Socket Set, 4mm – 12mm (14 pc)
- Metric Combo Wrench Set (7 pc)
- Metric Nut Driver 4mm – 11mm (9 pc)
- Nut Driver Handle
- 150mm Stainless Steel Ruler w/Pocket Clip
- 25 Blade Metric Thickness Gauge

No. 7611 .....**$186.50**

What's Inside the 9408, 9416, & 2008...

- Alignment Kit, 6"
- Awl, Scratch
- Batteries, Size D (2)
- Brush, Solder
- Burnishers, Contact (3)
- Calculator, Metric
- Extension, 4"
- Flashlight, Utility
- Gauge, Thickness
- Hammer, Ball Pein
- Handle, Regular
- Hemostat, Straight
- Knife, Electrician's
- Mirror
- Nutdrivers, Hex: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"
- Oiler
- Parts Boxes:
  (1) 6 Compartments
  (1) 17 Compartments
- Plier, Groove Joint, 10"
- Plier, Long Chain Nose
- Plier, Micro-Shear
- Plier, Midget Chain Nose
- Plier, Oval Head
- Plier, Retaining Ring: Internal/External, 6" OAL
- Punch, Center, 3/32"
- Punch, Drive Pin, 1/16"
- Punch, Pin, 1/8"
- Ruler
- Scissor, Electrician's
- Screwstarter: 3/16" x 6-1/2"
- Screwdriver Set, Slotted - 7 pc.: .025" - .100"
- Screwdriver, 1/4" Slotted Stubby
- Screwdriver, Phillips: #0,#1 & (2) #2 Blades
- Screwdriver, Slotted Offset: #2 - #6
- Screwdriver, Slotted: 1/8", 3/16", 1/4" Blades
- Screwdrivers, Slotted: 3/32" x 2", 1/8" x 8", 5/32" x 4", 5/16" x 6"
- Socket Set, 1/4" Drive - 14 pc.
- Solder Aid Tools:
  (1) Fork & Hook
  (1) Reamer & Scraper
- Solder Wick
- Solder, Pocket-Pak
- Soldering Iron
- Spring Hook, Pull & Lift
- Stripper Tool, 5-in-1
- Stripper w/Cutter, Wire
- T-Handle
- Tweezer , Angular
- Filament Holder
- Tweezer , Self Locking
- Wrench Set, Hex & Spline
- Wrench Set, Ignition, w/Pouch: 7/32" - 7/16"
- Wrenches, Adjustable, 4" & 8"

TEC-TUFF

9603 Master Field Engineer Tool Kit

113 PIECES

Featuring a DuPont Cordura® zip case with padded handle. **Features:** lift out, two-pocket pallet; built-in clip board; expandable gusset pouch; three outside pockets–one 10" x 12" and two 6-1/4" x 9-1/2". **Outside Dims**: 18-1/2"L x 11"W x 5-1/2D".

What's Inside the 9603 Kit...

- Alignment Kit
- Battery, AA
- Brush, Solder
- Burnisher, Contact, 1/4", 4" & 5"
- Calculator, Conversion
- Case, w/Slip-Out Box Holder
- Extension, 4"
- Flashlight, Penlight
- Gauge, Thickness, .0015"- .025"
- Hammer, Ball Pein
- Handle, Regular
- Hemostat
- Knife, Electrician's
- Mirror, Inspection
- Multimeter, Digital
- Nutdriver, 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16" Hex
- Parts Box: 11 & 17 Compartments
- Plier, Groove Joint
- Plier, Long Chain Nose
- Plier, Long Nose w/cutter, 5-1/2" OAL
- Plier, Micro-Shear
- Plier, Midget Chain Nose
- Plier, Oval Head
- Plier, Retaining Ring, Int/Ext
- Punch, Center
- Punch, Drive Pin
- Punch, Pin
- Rule, Flexible, 6"
- Scissor, Electrician's
- Screwdriver Blades, Offset: Slot #2-#6
- Screwdriver Blades, Phillips #1 & #2
- Screwdriver Blades, Slotted: 1/8", 3/16", 1/4
- Screwdriver, Phillips #0 1/8" X 2"
- Screwdriver, Phillips #0, Pocket Clip
- Screwdriver, Phillips #2 1/4" X 1-5/16"
- Screwdriver, Set Slotted
- Screwdriver, Slotted 1/4" Stubby
- Screwdrivers, Slotted, Blade 1/8" x 8", 3/32" x 2", 5/16" x 6", 5/32" x 4"
- Screwstarter, 3/16" Blade, Quickwedge
- Socket Set, 1/4" Drive
- Solder Aid Tool, Fork & Hook
- Solder Aid Tool, Reamer & Scraper
- Solder Wick; Solder, 60/40"
- Soldering Iron, 25W
- Spring Hook, Pull & Lift
- Stripper, 5-In-1 Tool
- Tweezers, Filament Holder
- Wire Stripper w/Cutter
- Wrench Set, Hex & Spline
- Wrench Set, Ignition, 7/32"-7/16"
- Wrench, Adjustable, 4" & 8"

Tec-Tuff® Master Field Engineer Tool Kit
No. 9603 .....$480.90
Tec-Tuff® Case & Pallets Only
No. 758CA888.....$134.85

Top Pallet

Bottom Pallet

TEC-TUFF

9801 Economy Electronics Kit

83 PIECES

Don't let the size of this kit fool you. This kit is loaded with first quality tools on two exclusive Tec-Tuff®, hand-sewn, rugged pallets. Your tools are housed in a special blow-molded, double-layer Polyethylene case to withstand every day use and abuse. 20"L x 15-1/2"W x 5"D. (I.D.)
No. 9801.....$333.30

What's Inside the 9801 Kit...

- Blade, Screwdriver, Phillips #0, #1
- Blade, Screwdriver, Slotted 3/16", 1/4", 1/8" – 4" OAL
- Crimper, Super Champ
- Extension, 4"
- Flashlight, Penlight
- Handle, Regular
- Iron, Soldering, 25w, 1/8" Dia. Tip
- Key, Hex Gorilla Grip Inch Set 9 pc
- Knife, #1 w/Safety Cap
- Knife, Electrician's
- Mirror, Fiberglass
- Nutdriver, 1/2", 1/4", 3/16", 3/8", 5/16", 7/16", 7/32", 9/32", 11/32" Hex
- Plier, Diagonal, Straight Jaw, Flush 4-1/2" OAL
- Plier, Groove Joint, 7"
- Plier, Long Nose w/Cutter 4-3/4" OAL
- Plier, Subminiature Long-Nose, Smooth Jaw
- Plier, Vise-Grip 4" w/Curved Jaws & Wire Cutter
- Scissor, Electrician's
- Screwdriver, Offset, Slot #2-#6,3" OAL
- Screwdriver, Phillips #0 1/8" x 2", 4-5/8" OAL
- Screwdriver, Slotted, 3/32 x 2"
- Socket Set, 1/4" Drive 14 pc
- Solder, 60/40, Pocket-Pak .031"
- Tape Measure, 1/4" x 10' 32nds to 12", then 1/16"
- Tweezer, Slotted
- Filament Holder, Angle Tip, 5-1/2"
- Wrench Set, Ignition, 7/32" to 7/16" - 8pcs.
- Wrench Set, Torx, Fold-Up 7 pc, T-6 to T-20
- Wrenches, Adjustable, 4" and 8"

TEC-TUFF

7622 Field Engineer's Portable Tool Kit

62 PIECES

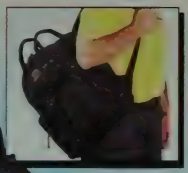
Today's hi-tech devices require expert maintenance technicians who use only a few key tools. The DuPont Cordura® Plus nylon case is built to provide space for tools in the first section and a finished attache case, with pen holder, document portfolio and legal pad holder in the second. Both sections are separated by a twin zipper. The tool section contains 34 pockets. Dims: 17"W x 12"H x 5"D with one large padded outside covered pocket 14-1/2" x 10", gusseted to expand to 2-1/2" and two smaller pockets on the outside 6-3/4" x 10", gusseted to expand to 2-1/2".

Tec-Tuff® Field Engineer's Portable Tool Kit
No. 7622 .....$411.55
Tec-Tuff® Case & Pallets Only
No. 758CA022.....$118.30

What's Inside the 7622 Kit...

- Alignment Tool, 6"
- Flashlight, Penlight
- Handle, Regular
- Hemostat, Straight
- Hex Key Set, Fold-Up, 9 pcs, .050" - 3/16"
- Insertion/Extraction Tool
- Knife, #1 with 5 pack blades
- Magnifier
- Circuitmate, Pen Size Meter
- Nutdrivers, 3/16", 7/32", 1/4", 9/32", 5/16", 3/8", 7/16" Hex
- Patch Cord, Minigrabber Each End, 12", Black
- Patch Cord, Minigrabber Each End, 18", Red
- Plier, Locking-Curved Jaw
- Plier, Long Chain Nose
- Plier, Midget Oval Head
- Rule
- Scissor, Embroidery
- Screwdriver, 4-in-1: #1 & #2 Phillips, 1/4" & 3/16" Slot
- Screwdriver, Phillips #0
- Screwdriver, Slotted Set, 7 pcs. .025" - .100"
- Screwdriver, Slotted 3/32" x 2" Blade
- Screwdriver, Torx, 5 Bits, Magnetic, T15-T30, 8" OAL
- Screwholder, Slotted, 3" For 6-8-10-12 Screws
- Solder Wick
- Solder, Pocket-Pak
- Soldering Iron, 25W
- Stripper w/Crimper, Coax Rg-59 & Rg-6
- Stripper, Cable, Coaxial
- Tester, Circuit, 3-Wire, 125V
- Tester, Telecheck Modular Phone Line
- Tweezer, Ang. Filament Holder
- Wire Stripper w/Cutter
- Wrench Set, O.E., Metric, 5.5mm-11mm
- Wrench, Adjustable, 6"
- Wrist Strap, Adjustable, 6' Coil Post Snap Alligator Clip

Weighs only 15 pounds with tools!



70 PIECES

TECHNI-TOOL

Carry your field service tools hands free!

Electronics Field Service Backpack Tool Kit

Now you can transport your tools – hands-free. This comfortable, 75 pocket tool kit offers a modern day alternative to conventional tool kit designs. The backpack is made of durable Cordura Plus fabric and measures 13"W x 17-1/2"H x 9"D. Interior panels contain 50 tools selected especially for electronic field service. The additional 25 pockets may be used to store other tools or components and a 7" x 5" multi-compartment plastic tray is included for storing small parts or hardware. Padded handles and adjustable shoulder straps for greater comfort. Black.

Techni-Tool® Electronic Field Service Backpack with 50 Tools
No. 758TT900 .....$514.50
Backpack with 75 Pockets Only
No. 297CA1132 .....$112.15
OPTIONAL FLUKE 115 MULTIMETER
No. 374TE0511 .....$156.95

What's Inside...

- 13 pc. Wrench Set, Ballpoint, English, .050 – 3/8"
- 9 pc. Wrench Set, Ballpoint, Metric, 1.5mm – 10mm
- Adjustable Wrench 1/2" jaw, 4" OAL
- Adjustable Wrench, 15/16" jaw, 8" OAL
- Adjustable Wrist Strap, 1/4" snap, 6' cord
- Crimping Tool, 6 in 1
- Desoldering Tool, Vacuum
- Extension Blade 4"
- Mag-Lite Flashlight, 5-3/4" OAL
- Nutdriver Blades, English, 5/16", 11/32", 3/8", 7/16", 1/2", 3/16", 7/32", 1/4", 9/32" Hex
- Nutdriver Blades, Metric, 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 9mm, 10mm
- Offset Ratchet Screwdriver
- Phillips Screwdriver, #0, 2", 4-5/8" OAL
- Phillips Screwdriver, #1, 3", 6-5/8" OAL
- Phillips Screwdriver, #2, 4", 8-1/8" OAL
- Plier, 1/2" Flush Jaw
- Plier, Long Nose, 4-1/2" OAL
- Plier, Needle Nose, 5-3/4" OAL
- Plier, Transverse End
- Ratchet Handle, Reversible 1-3/16" x 5-1/4"
- Screw Starter – Slot/Phillips, 1/4"
- Slot Screwdriver, 1/4" x 4", 8-1/8" OAL
- Slot Screwdriver, 3/16" x 3", 6-5/8" OAL
- Slot Screwdriver, 5/16" x 6", 10-1/2" OAL
- Soldering Iron, 25W
- Stripper Tool, T6 for 16-26 AWG
- Utility Pliers, 1-1/8", 7" OAL
- Vise Grip Pliers, Long Nose, 6"

An optional Fluke 115 True-rms Digital Multimeter can be included.

113 PIECES

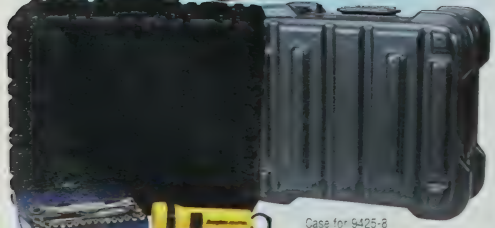
TEC-TUFF

9425 Electronic Field Engineer Tool Kit

Best Seller

As an engineer working in the field, you need a tool kit that can be used in a variety of applications. Our tool kit includes the right tools for the most common service and repair applications and allows you to install and set up a variety of electronic equipment. The case is rotationally molded with aluminum frames for strength and support. Combination locks are provided for security and the case is easy to transport with its ergonomically-comfortable padded handle. A choice of 7", 8" or 12" depths is available.

Case for 9425-7 & 9425-12



Case for 9425-8

What's Inside the 9425 Kits...

- Alignment Kit-6" - "K"
- Anti-Static Solder Wick
- Awl, Scratch
- Blades, Phillips: #1, #2
- Blades, Slotted: 1/8", 1/4", 3/16"
- Burnisher Set, Contact, 3 Pc
- calculator, Conversion
- Case, Roto-Tec
- Electrician Knife
- Extension, 4"
- Flashlight & Batteries
- Fork & Hook Solder Aids
- Hammer, Ball Pein, 4 oz.
- Handle, Regular for Snap-in blades
- Handle, Tee for Snap-in blades
- Hemostat, 5-1/2" OAL
- Mirror, Inspection
- Nutdriver, Hex: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"
- Oiler, Needle Point
- Plier, Groove Joint, 10"
- Plier, Long Chain Nose
- Plier, Long Nose Serrated
- Plier, Micro Shear
- Plier, Oval Head
- Plier, Retaining Ring
- Punch, Center 3/32"
- Punch, Drive Pin 1/16"
- Punch, Pin, 1/8"
- Reamer & Scraper Solder Aid
- Rule, Inch & Wire Gauge
- Scissor, Electrician's
- Screwdriver, Offset, Slot #2-#6
- Screwdrivers, Phillips: #0, #2
- Screwdrivers, Slotted: 1/8" x 8", 3/32" x 2", 5/16" x 6", 5/32" x 4"
- Screwdriver, Slotted 1/4" Stubby
- Screwdriver Set, Slotted, 7 pc
- Screwstarter, 3/16" Blade
- Socket Set, 1/4" Driver - 14 pcs.
- Solder Brush
- Solder, 60/40
- Soldering Iron, 25W
- Spring Hook, Lift
- Stripper w/Wire Cutter
- Stripper, 5-in-1, "K"
- Thickness Gauge
- Tweezer, Filament Holder
- Tweezer, Self-Locking
- Wrench, Adjustable: 4" & 8"
- Wrench Set, Hex & Spline
- Wrench Set, Ignition 7/32" thru 7/16", 7 pc.

Dimensions:
17-3/4"L x 14-1/2"W x 7"D (I.D.),
17-3/4"L x 14-1/2"W x 8"D (I.D.),
17-3/4"L x 14-1/2"W x 12"D (I.D.).

SAVE $75.00

Tec-Tuff®
Electronic Field Engineer's Tool Kit
No. 9425-7* 7" Tool Kit (Black)
Reg. ~~$514.50~~ **SPECIAL $424.73**
No. 9425-8 8" Tool Kit (Silver) **$499.95**
No. 9425-12 12" Tool Kit (Black) **$534.45**

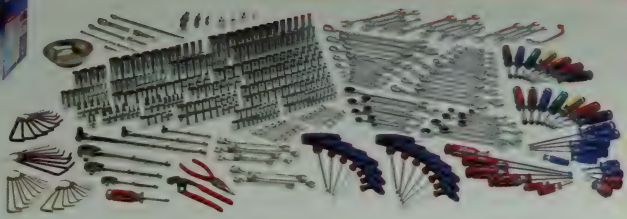
Tec-Tuff®
Case & Pallets Only
No. 758CA907* 7" Case
Reg. ~~$210.70~~ **SPECIAL $135.70**
No. 758CA152 8" Case **$215.00**
No. 758CA912 12" Case **$219.00**

***Special Offer good until 6/30/09**

All tools meet the stringent new ANSI/ASME Specifications!

Crescent Professional Tool Set – 442 pc

New!



From the simplest adjustment to the most complicated change-out, this Crescent tool set has everything any professional mechanic could need. These top quality tools are manufactured to the Crescent standards and 50% above ASME specs. The 442 piece set includes 1/4", 3/8" and 1/2" drive sets in 6, 12 and 12 point deep. SAE and metric combination wrenches. Full T-handle Hex driver set, tongue and groove pliers, extensions and more. A lifetime guarantee makes this tool set one that every automotive repair professional wants and needs.

No. 272TT442 .....$639.92

1/4" DRIVE:
- Sockets, 6 Point, SAE - 1/8" to 1/2" (11 pc), Metric - 3.2mm to 12mm (13 pc)
- Sockets, 12 Point, SAE - 5/32" to 1/2" (10 pc), Metric - 3.2mm to 12mm (13 pc)
- Sockets, Deep Well, 12 Point, SAE - 5/32" to 1/2" (10 pcs), Metric - 3.2mm to 12mm (13 pc)
- Hex Bits Sockets - 3/16" to 3/8" (5 pc)
- Screwdriver Bits Sockets - 7/32", 1/4", #1, #2 (4 pc)
- Torx® Bits Sockets - T-15, T-20, T-25 (3 pc)
- Extension Bars - 1 1/2", 3", 6"
- 1/4" to 3/8" Adapter
- Spinner Handle - 6"
- Breaker Bar - 6"

3/8" DRIVE:
- Socket, 6 Point, SAE - 1/4" to 3/4" (9 pc), Metric - 6mm to 19mm (14 pc)
- Sockets, 12 Point, SAE - 1/4" to 3/4" (9 pc), Metric - 6mm to 19mm (14 pc)
- Sockets, Deep Well, 12 Point, SAE - 1/4" to 3/4" (9 pc), Metric - 6mm to 19mm (14 pc)
- Sockets, 8 Point, SAE - 1/4" to 1/2" (5 pc)
- Screwdriver Bits Sockets - 7/32", 9/32", 3/8", #1, #2, #3, #4 (7 pc)
- Torx® Bits Sockets - T-30, T-40, T-45, T-50 (4 pc)
- Extension Bars - 3", 6", 12"
- Spark Plug Sockets - 5/8", 13/16"
- 3/8" to 1/4" and 3/8" x 1/2" Adapter
- Breaker Bar - 10"

1/2" DRIVE:
- Sockets, 6 Point Sockets, SAE - 3/8" to 3/4" (7 pc), Metric - 9mm to 19mm (11 pc)
- Sockets, 12 Point Sockets, SAE - 3/8" to 1" (11 pc), Metric - 9mm to 22mm (14 pc)
- Sockets, Deep Well, 12 Point, SAE - 3/8" to 1" (11 pc), Metric - 9mm to 22mm (14 pc)
- Extension bars - 3", 6"
- Spark Plug Sockets - 5/8", 13/16"
- 1/2" x 3/8" Adapter
- Breaker Bar -15"
- Combination Wrenches, SAE - 1/4" to 1" (15 pc); Metric - 6mm to 22mm (15 pc)
- Combination Ignition Wrenches\, SAE - 1/8" to 3/8" (11 pc); Metric - 3.2mm to 11mm (10 pc)
- Ratcheting Combination Wrenches, SAE -5/16" to 3/4" (8 pc); Metric - 8mm to 18mm (8 pc)
- Open End Wrenches, SAE - 1/4" to 13/16" (5 pc), Metric - 6mm to 19mm (7 pc)
- Flare Nut Wrenches, SAE - 3/8" x 7/16", 1/2" x 9/16", 5/8" x 11/16" (3 pc) Metric - 9mm to 18mm (5 pc)
- Tappet Wrenches, SAE - 3/8" to 11/16" (4 pc)
- Obstruction Wrench, SAE - 9/16" x 5/8"
- Screwdrivers, Slotted and Stubby (8 pc)
- Screwdrivers, Philips and Stubby (8 pc)
- Nut Drivers, SAE - 3/16" to 1/2" (7 pc); Metric - 5mm to 11mm (7 pc)
- Hex Keys, Short, SAE - .050" to 1/4" (11 pc); Metric - 1.5mm to 8mm (11 pc)
- Hex Keys, Long, SAE - 5/64" to 1/4" (9 pc); Metric - 1.5mm to 6mm (9 pc)
- Pliers, Tongue & Groove Pliers - 8"; Long Nose Pliers - 8"
- T-handle Hex Keys, SAE - 3/32" to 5/16" (7 pc); Metric - 2.5mm to 8mm (7 pc)
- Magnetic Stainless Steel Part Tray
- Quick-Release Ratchet, 72 Tooth, 1/4", 3/8", 1/2"
- Universal Joint, 1/4", 3/8", 1/2"

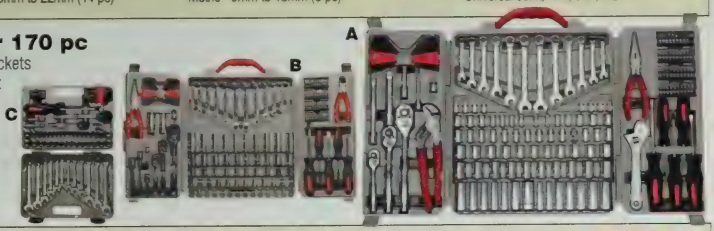
Professional Tool Sets – 148 pc or 170 pc

Chrome vanadium ratcheting wrenches feature lock-on sockets that won't slip off and a large, quick release button for fast changes. Magnetic screwdrivers have comfortable rubber handles and a wide range of bits. (Taiwan)

A. 170 Piece Tool Set No. 272IE170.....$121.98

B. 148 Piece Tool Set No. 272IE148 .....$101.73

C. 70 Piece Tool Set No. 272IE700 .....$62.34



70 Piece Tool Set Includes:

3/8" DRIVE:
- 72-Tooth Quick-release Ratchet Drive
- 3" Extension
- 3/8" (Female) to 1/4" (Male) Adapter
- 12-Point Sockets: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 10mm, 11mm, 12mm, 13mm, 14mm, 15mm, 17mm, 19mm

1/4" DRIVE:
- 72-Tooth Quick-release Ratchet Drive
- 3" Extension
- 6-Point Sockets: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16, 5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm, 12mm
- Combination Wrenches: 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 10mm, 12mm, 13mm, 14mm, 15mm, 17mm
- SAE Hex Keys with Holder (8 pc set)
- Dura-Driver™ MAGNETIC Bit Driver
- 1" Driver Bits: Phillips®, slotted, Torx®, Hex (12 pc set)
- Plastic Storage Case

148 Piece Tool Set Also Includes:

3/8" DRIVE:
- 6" Extension
- Spark Plug Sockets: 5/8", 13/16"
- 12-Point Sockets: 5/16", 9mm (excluded 13/16", 11mm)
- 6-Point Deep Sockets: 7/16", 1/2", 9/16", 11/16", 3/4", 12mm, 13mm, 14mm, 16mm, 17mm

1/4" DRIVE:
- 6-Point Sockets: 1/2", 9/16", 4mm, 13mm
- Combination Wrenches: 5/16", 8mm (excluded 11/16", 17mm)
- Pliers: 8" Long Nose Cutting and 6" Diagonal Cutting
- MAGNETIC Screwdrivers: 1/4" X 4" Slotted, 3/16" X 3" Slotted, #2 X 4" Phillips®, #1 X 3" Phillips®
- 1" Driver Bits with Holders: Phillips®, Slotted, Torx®, and Hex (44 pc set)
- SAE Hex Keys with Holder (18 pc set)

170 Piece Tool Set Also Includes:

Great Seller

1/2" DRIVE:
- 72-Tooth Quick release Ratchet Drive
- 5" Extension
- 6-Point Sockets: 1/2", 9/16", 5/8", 3/4", 7/8", 15mm, 17mm, 18mm, 19mm and 21mm

3/8" DRIVE:
- 12-Point Sockets: 3/16", 1/4", 7/8", 6mm, 7mm, 8mm, 16mm, 18mm, and 20mm
- 6-Point Deep Sockets: 3/8", 5/8"

1/4" DRIVE:
- 6-Point Sockets: 5/32", 5.5mm
- 10" Tongue & Groove Pliers
- 8" Adjustable Wrench
- SAE Hex Keys with Holder (13 pc set)
- METRIC Hex Keys with Holder (13 pc set)

Great Value

TEC-TUFF 9442 PC Maintenance Kit

Created for the repair and maintenance of personal computers, video terminals, etc. This 33 piece, first quality tool kit is packaged in our Gray DuPont Cordura® Nylon zip kit with 15 pockets. The case has a rugged zipper and padded sides. Dimensions: 9-1/2"L x 7-1/2"W x 2-1/2"D (I.D.)

What's Inside the 9442...

- Screwdriver Set w/Scratch Awl- 6 pc
- 1/4& 1/8" Slotted Screwdriver Blades
- Blade Set
- #1 Phillips Screwdriver Blade
- Regular Handle
- Fold-Up Hex Key Set: .050 to 3/16"
- Midget Oval Head Plier: 4; OAL
- Long Chain Nose Plier: Serrated, 5-1/2" OAL
- 6" Adjustable Wrench: Chrome w/Cushion Grip
- #1 Knife w/Safety Cap
- Hammer Set w/6 Tips & Metal Handle: 7" OAL
- Anti-Static Solder Wick
- Pocket-Pak Solder: 60/40, .031 Dia., 1/2 oz.
- 25W Soldering Iron with 1/8" Dia. Tip
- Boley Style Tweezers: Nickel Plated Type AA;
- Flexible Stainless Steel Rule: Inch, 6" w/Pocket Clip
- 2x Magnifier w/Case
- Penlight Flashlight

Tec-Tuff® PC Maintenance Kit
No. 9442 .....$151.20
Tec-Tuff® Case & Pallets Only
No. 758CA9441.....$39.60

Best Seller

TEC-TUFF

Our Most Popular Tool Kit!

9800 Deluxe Classic Field Engineer's Tool Kit

The 137 tools found in our *Tec-Tuff®* case are a complete assortment of tools featuring Xcelite® nutdrivers and screwdrivers with snap-in blades and solid handles. Choose from Black or Silver in three depths – 6", 8" and 10", with two pallets. Each case measures 18-1/2"L x 13-1/2"W. (I.D.)

137 PIECES

What's Inside the 9800 Deluxe Kit...

- Alignment Kit, 6"
- Alignment Tool, 5" OAL
- Battery, AA Size (2)
- Blade, Allen Hex .050 4" OAL
- Blade, Allen Hex 1/16", 5/64", 7/64", 9/64", 3/16", 3/32" x 4", 1/8" x 4", 5/32" x 4" Blade
- Blade, Pozidriv #1, #2
- Blade, Screwdriver Phillips #1, # 2
- Blade, Torx #6, #8, #10, #15, #20, #25, #27
- Blade, Screwdriver, Slotted 3/16", 1/4", 5/16"
- Boxes (2), Parts, 6 & 18 Compartments
- Brushes, (1) Sash (1) Solder
- Burnisher, Contact, 3 pc.
- Calculator, Conversion
- Extension, 4" & 7"
- Flashlight, Penlight 2-Cell
- Gauge, Thickness
- Hacksaw, Mini, 8-3/4" OAL
- Hammer, Ball Pein, 4 oz.
- Handle, Regular
- Handle, Tee
- Hex Key, Set, 7 pc. Std.
- Knife, Electrician's
- Magnifier; Mirror
- Nutdriver, 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"
- Oiler
- Plier, Groove Joint, 4", 10"
- Plier, Long Nose Serrated
- Plier, Micro-Shear
- Plier, Retaining Ring
- Plier, Midget Chain Nose
- Punch, Center, 3/32"
- Punch, Drive Pin 1/16"
- Punch, Pin, 1/8"
- Retrieving Tool
- Ruler, Inch and Wire Gauge
- Scissor, Electrician's
- Scratch Awl
- Screwdriver, Offset #2 - #6, Slotted Blade
- Screwdriver, Phillips #0 w/Pocket Clip, #1 & #2
- Screwdriver, Set, Slotted .025"-.100" 7 pc.
- Screwdriver, Slotted 1/4" Stubby
- Screwdriver, Slotted 3/32" x 2", 1/8" x 8", 5/32" x 4", 5/16" x 6" Blade
- Screwholder, Slotted 3" & 10"
- Socket Set, 1/4" Drive, 14 pc.
- Solder Aid Tool, Fork & Hook
- Solder Aid Tool
- Reamer & Scraper
- Solder Wick
- Solder, Pocket-Pak
- Soldering Iron, 25W
- Spring Hook, Pull & Lift
- Stripper, 5 in 1 Tool
- Stripper, Wire w/Cutter
- Tweezers, Angular Filament Holder
- Tweezers, Self Locking
- Tweezers, Straight Lock
- Wrench Set, Ignition, 7/32" - 7/16"
- Wrench, Adj, 4" & 8"

Tec-Tuff® Black
Deluxe Classic Field Engineer's Tool Kit

No. 9802-6-2	6" Tool Kit	**$618.12**
No. 9804-8-2	8" Tool Kit	**$622.00**
No. 9806-10-2	10" Tool Kit	**$626.15**

Tec-Tuff® Case & Pallets Only

No. 758CA972	6" Case	**$168.10**
No. 758CA976	8" Case	**$168.10**
No. 758CA984	10" Case	**$168.10**

Tec-Tuff® Silver
Deluxe Classic Field Engineer's Tool Kit

No. 9801-6-2	6" Tool Kit	**$659.50**
No. 9803-8-2	8" Tool Kit	**$663.65**

Tec-Tuff® Case & Pallets Only

No. 758CA970	6" Case	**$157.25**
No. 758CA974	8" Case	**$164.80**

7623-M Hospital/Laboratory Kit

This 146-piece kit provides all the basic tools for preventive maintenance and safety checks to vital life saving equipment found in hospitals & laboratories. Nested in a *Tec-Tuff®* high density Polyethylene molded case. Dimensions: 18"W x 13"H x 8"D (I.D.)

Tec-Tuff® Hospital/Laboratory Kit
No. 7623-M.....$567.05

Tec-Tuff® Case & Pallets Only
No. 758CA974.....$164.80

146 PIECES

What's Inside the 7623-M...

- Alignment kit, 6"-"k"
- Battery, 'D', (2)
- Blades, Allen Hex .050, 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16"
- Blade, Phillips #1, #2 screwdriver
- Blades, slotted 3/16", 1/4", 5/16" Screwdrivers
- Brush, solder; Burnisher, contact heavy-duty
- Burnishers, contact set of 3
- Calculator, conversion 4"
- Extension, 4"
- File set, assorted, 3 pc. with handle
- File set, field service 12 pc
- Flashlight, heavy duty
- Gauge, thickness, .0015" – .025", 26 leaves
- Hammer, ball pein, 4 oz.
- Handle, regular
- Handle, tee, 3-1/2" x 1-5/8"
- Heat sink, 2-5/8" OAL
- Hemostat, curved, lock type, 5-1/2" OAL
- Hemostat, straight lock type, 5-1/2" OAL
- Iron, soldering, 25W
- Knife, Electricians' locking
- Magnifier 5x
- Mirror, inspection, plain
- Nutdriver, 3/16", 7/32", 1/4" hex
- Nutdriver, 5/16", 11/32", 3/8", 7/16", 1/2", 9/32" hex
- Oiler, needle point
- Plier, diagonal, oval head, 5" OAL
- Plier, groove joint, 10" OAL
- Plier, locking-curved jaw 7" OAL, wire cutter
- Plier, long nose w/cutter serrated, 5.5" OAL
- Plier, long nose-serrated 5" OAL, spring
- Plier, micro-shear, 5.11" OAL, flush, spring
- Plier, retaining ring, 6" internal/external
- Punch, center, solid
- Punch, drive pin 1/16", 4" OAL
- Punch, pin, 1/8"
- Scissor, Electricians'
- Scissor, 3-5/8" OAL
- Screwdriver, Offset, Slot #2-#6, 3" OAL
- Screwdrivers, Phillips #0, 1/8" x 2", 4-5/8" OAL; #1, 3-1/16" x 1-7/16", 3-7/16" OAL; #2, 1/4" x 1-5/16", 3-3/8" OAL
- Screwdriver set, slotted - 7pcs: .025"-.100"
- Screwdrivers, slotted 1/8" x 8" blade, 10-5/8" OAL; 3/32" x 2" blade, 4-1/4" OAL;
- Screwdrivers, slotted 5/16" x 6" blade, 10-1/2" OAL; 5/32" x 4" blade, 6-5/8" OAL
- Screwstarter, 3/16" blade 6-1/2" OAL
- Socket set, 1/4" drive - 14 pcs
- Solder aid tools, Fork & Hook, 8"; Reamer & Scraper, 6.5" OAL
- Solder wick; Solder, 60/40
- Spring hook set, 8-pcs.
- Stripper, 5 in 1 tool
- Tweezer, filament holder 6" OAL
- Wrench sets, Hex & Spline
- Ignition, 7/32" - 7/16"
- Wrench, adjustable, 4", 8"

TECHNI-TOOL EXCLUSIVE

TEC-TUFF

Deluxe Telecommunications Tool Kit

From basic telco jobs on up to advanced tasks like troubleshooting PBX/switching equipment, advanced line testing and checking UPS, we've got you covered. Our cases feature an exclusive Tec-Tuff® valance – extra wide anodized aluminum that's the strongest there is. It keeps its shape no matter how many tools get dropped onto it.

Choose your case:

The Tec-Tuff® Wheeled Case: a rugged, rotationally molded dense polyethylene case with unique molded-in bumper system so the hardware and valance are "drop-protected." It features four 2" replaceable, built-in cassette-type wheels with sealed bearing construction, plus a quick-release metal telescoping luggage cart handle that locks into place in extended and closed positions. Two keyed Franzen draw bolt latches, a three-tumbler combination lock and a provision for padlock or cable tie. Dimensions: 18"L x 15"W x 10.5"D. (I.D.)

The Tec-Tuff® Attache Case: made of specially engineered, high-density, structural polyethylene heat-molded under pressure to give you a case that won't sag in the center or punch through at the corners or molded-in feet. Extra-wide, re-enforced, anodized aluminum valance; deep-set to prevent the valance from separating during use. Full-length piano hinge; two ball-bearing, locking-lid stays so the lid stays open even when filled with tools; extra-wide top and bottom pallet supports; ridged pallets that are hand-sewn, riveted and neatly finished; a comfort-padded handle; and two heavy-duty locking latches. Dimensions: 18.5"L x 13.5"W x 10"D.

70 PIECES

Easy rolling built-in cassette-type wheels

Back of the bottom pallet.

Wheeled Case

Attache Case

What's Inside the Deluxe Telecommunications Kit...

- Adapter with Modular Jack
- Awl, Scratch
- Blade, #11, Sharp Point
- Cable Ties
- Can Wrench with Stripper
- Diagonal Cutter, 5"
- Diagonal Cutter, Semi-Flush
- Extension Blade, Interchangeable, 4"
- Flashlight
- Handle, 99 Series
- Hex Key Set - 9 Pc.
- Holder, Straight Lock
- Knife, #1
- Knife, Electrician's
- Lamp Extractor
- Mirror, 7/8" /Magnetic Pick-up Tool
- Nutdriver Blade, Interchangeable: 1/4"
- Nutdriver Blade, Interchangeable: 5/16"
- Parts Box (6 Compartments)
- Plier w/side cutter, Long Chain Nose, 6-5/8"
- Plier, Groove and Tongue, 10"
- Pliers, Mini Chain Nose with Cutter
- Pliers, Side-Cutting, Crescent
- Pliers,Long Nose Locking
- Probe Pic, 105° Angle, Insulated
- Punchdown Tool, Non-Impact, w/66 Blade
- Ruler, Stainless Steel
- Scissor, Electrician's
- Screw Starter, Double Ended
- Screwdriver Blade, Phillips: #0
- Screwdriver Blade, Phillips: #1
- Screwdriver Blade, Slotted: 1/4"
- Screwdriver Blade, Slotted: 1/8" x 4"
- Screwdriver Blade, Slotted: 5/16"
- Screwdriver Blade: 1/4"
- Screwdriver, 4-in-1
- Screwdriver, Phillips w/Pocket Clip
- Screwdriver, Phillips: #1
- Screwdriver, Phillips: 3/16" Stubby
- Screwdriver, Phillips: Stubby #2
- Screwdriver, Slotted: 3/32" x 2"
- Screwdriver, Square: 1/4" Stubby
- Service Tool, 6-in-1
- Solder Aid Tool, Brush & Scraper Tip
- Solder Wick
- Solder, Pocket Pack
- Soldering Iron w/1/8" Tip
- Spring Hook, Pull and Lift, 8"
- Stripper w/Cutter, Double, 22/24 AWG
- Stripper with Wire Cutter
- Telephone Line Tester
- Termination Kit, RJ 45-11
- Tone and Probe Kit, Basic
- Torx Driver Blade, Interchangeable: #10
- Torx Driver Blade, Interchangeable: #15
- Tweezer, Filament Holder
- Wire-Wrap/Unwrap, Manual, 30 AWG Wire
- Wrench, Adjustable, 4"
- Wrench, Adjustable, Crescent, 8"

Tec-Tuff® Black and Teal
Deluxe Telecommunications Tool Kit
No. 758TK006 10.5" Wheely Kit **$1,048.95**

Tec-Tuff® Case & Pallets Only
Accommodates the tools listed or similar:
No. 758CA006 Wheely Case **$375.30**

Tec-Tuff® Black
Deluxe Telecommunications Tool Kit
No. 758TK009 10" Attache Kit **$837.21**
No. 758TK011 10.5" Wheely Kit **$1,069.35**

Tec-Tuff® Case & Pallets Only
Accommodates the tools listed or similar:
No. 758CA193 Attache Case **$217.15**
No. 758CA011 Wheely Case **$375.30**

TEC-TUFF

9502 Lan Manager Tool Kit

Lan Supervisors or Managers who fill in for field service find this kit a life saver! Complete with all the tools necessary to perform repairs on most LAN equipment, the dual case openings let you keep your tools separate and secure. The generous middle compartment has ample storage space for anything from notebooks to a lap top computer. The Black DuPont Cordura® Plus Nylon case has 43 useful pockets on the one side and a built-in clipboard for papers on the other. The middle compartment has dual pull handles with heavy-duty zippers for easy opening. The case also has a flap pocket for a multimeter and a pouch for small items. Padded web handles and "D" rings for a shoulder strap complete this unique case. Dimensions: 18"L x 12"W x 8"D. (I.D.)

Tec-Tuff® Lan Manager Tool Kit
No. 9502 ..... **$448.80**

Tec-Tuff® Case & Pallets Only
No. 758CA9501 ..... **$166.60**

72 PIECES

What's Inside the 9502...

- Balldriver Set, .050 - 5/16 L-Wrench, 12 Pc
- Blades, Screw Driver Torx T10, T15
- Blades, Screwdriver Phillips #1, #2
- Blades, Screwdriver Slotted, 1/8", 5/16", 1/4"
- Crimper, Super Champ
- Extension, 4"
- Hammer, Ball Pein, 4oz.
- Handle, Reg
- Hemostat, Straight Lock
- Insertion/Extraction Tool
- Knife, #1 w/Safety Cap & 5/pk Blades
- Mirror, Inspection
- Multimeter, Digital, Pocket
- Nutdrivers, Hex 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"
- Plier, Locking, w/Wire Cutter
- Plier, Long Chain Nose-Serrated
- Plier, Midget Diagonal
- Rule, Stainless Steel, 6"
- Scissor, Electrician's
- Screwdriver, 12-In-1
- Screwdriver, Offset, Slot 1/4"
- Screwdriver, Phillips #0
- Screwdriver, Set Slotted .025"-.100" 7pc
- Screwdrivers, Slotted 3/32 x 2", 5/32 x 4" Blade
- Screwstarter, Double End
- Solder Wick, 2.5'
- Soldering Iron
- Stripper, Wire W/Cutter
- Tweezers, Filament Holder
- Wrench Set, Combo, 10 pc Midget
- Wrench, Adj, 4" & 8"

TEC-TUFF

Best Seller

NSN-5180-01-244-1290

8360 GSA
USMC Communications Tool Kit

This kit used extensively by the USMC in the field providing a single complete unit for communication service technicians. Our unique, three pallet, swing-out construction. The top two pallets are hinged together and store in the lid. Bottom pallets house larger items. Black epoxy, 1/4-turn military clasps, heavy-duty aluminum piano hinge and frame. Heavy-duty polyethylene shell in Mil-Spec green. Military spring-loaded cushioned handle. Locking clasp. Canvas bag included for emergencies when complete set is not needed. Dimensions: 17"L x 14"W x 9"D.
(Option A not included)

Tec-Tuff® GSA
USMC Communications Tool Kit
No. 8360 9" Tool Kit **$934.50**

Tec-Tuff® Case & Pallets Only *(Tote bag not included)*
No. 758CA2717 9" Case **$225.00**

OPTION A. Techni-Stat® ESD Service Mat
No. 758ST1724 ..... **$47.86**

What's Inside the GSA USMC Kit...

- Adjuster: Spring, Pull, Spring, Push
- Alignment Kit, Master Deluxe
- Blades: #1 Assortment,
- Blades: Allen Hex .050", 1/16", 5/64", 7/64", 9/64", 3/16",
- Blades: Allen Hex 3/32" x 4", 1/8" x 4", 5/32" x 4"
- Blades:Torx #6, #8, #10, #15, #20, #25
- Brush, Solder
- File, Half Round, Cut 2
- Hammer, Ball Pein
- Handle: #2 Wooden, Regular, Tee
- Hemostat, Straight
- Hex Key Set, Metric Short Arm, Kit #24
- Knife: #1 w/Safety Cap
- Electrician's Mirror
- Nutdrivers 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2" Hex
- Oiler
- Plier, Curved Needle Nose,
- Plier, Cutter, 8.75" OAL
- Plier, Crimper,
- Plier, Diagonal Oval Head
- Plier, Diagonal Tapered
- Plier, External Snap Ring
- Plier, Groove Joint, 7"
- Plier, Groove Joint, 10"
- Plier, Internal Snap Ring
- Plier, Lineman's
- Plier, Locking-Curved Jaw, 7"
- Plier, Wire Cutter
- Plier, Long Chain Nose
- Plier, Midget Chain Nose
- Plier, Oblique Head
- Plier, Oval Head
- Probe Set, Double Ended
- Probe, Communication Wiring
- Punch, Center, 3/32"
- Punch, Drive Pin, Set–8 pcs., 1/16"-5/16"
- Retrieving Tool, Flexible
- Retrieving Tool
- Magnetic Rule
- Scissor, Electrician's
- Screwdriver Set, Offset
- Ratchet, 5 pcs.
- Screwdriver, Long Reach
- Screwdriver, Mechanics
- Screwdriver, Phillips #0 w/Pocket Clip; #1, 3/16" x 3"; #2, 1/4" x 4"; #2, 1/4" x 1-5/16"; #3,
- Screwdriver, Slotted, .025"-.100", 7 pcs.,
- Screwdriver, Slotted 1/4" Stubby
- Screwdriver, Slotted 3/32" x 2", 1/8" x 3", 3/16" x 3", 5/16" x 6" Blade
- Screwstarter, 3/16" Blade, 6-1/2" OAL
- Screwdriver, Quickwedge
- Screwdriver, Socket Set, 1/4" Drive, 14 pcs.
- Solder Aid Tool, Fork/Hook
- Solder Removal Tool
- Soldering Iron
- Stand, Solder
- Stripper, Wire w/Cutter
- Tip, Chisel, 1/8" Tip,
- Tweezers, Self-locking
- Wrench Set, Ignition 7/32" - 7/16" Pouch
- Wrench, Adj, 4" & 8"

TEC-TUFF

9408 Systems Maintenance Tool Kit

117 PIECES

This kit was designed by the US Army with Techni-Tool® to provide a field technician with a first quality tool assortment with snap-in blades and solid handle screwdrivers. The complete assortment of 117 pieces shown below. We have this kit in our new improved two pallet I-Beam™ case design. Custom Convert-A-Kit® or Design-A-Kit® modifications are available...call or write for details. Dimensions: 17-3/4"L x 12-1/2"W x 5"D. (I.D.)

Tec-Tuff® Systems Maintenance Tool Kit
No. 9408-GSA 5" Tool Kit **$582.75**

Tec-Tuff® Case & Pallets Only
No. 758CA9408 5" Case..... **$162.65**

What's Inside the 9408 Kit...

- Alignment Kit, 6"
- Battery, AA Size (2)
- Blade, Hex 1/16, 1/8, 3/16, 3/32, 5/32, 5/64, 7/64", 9/64"
- Blade, Torx #6, #8, #10, #15, #20, #25
- Blade, Hex .050
- Burnisher, Heavy-duty
- Calculator, Metric
- Case, I-Beam
- Flashlight, Penlite
- Gauge, Metric 25 Blades
- Hammer, Ball Pein, 4 oz.
- Handle, Regular
- Hex Key Kit, Metric
- Knife, Electrician's
- Mirror, Inspection
- Nutdriver, Hex, 1/2", 3/8", 5/16", 7/16", 11/32", 1/4", 3/16", 7/32", 9/32"
- Oiler
- Plier, Diagonal, Semi-Flush,
- Plier, Oval Diagonal Head
- Plier, Long Chain Nose,
- Plier, Pump, 10" OAL
- Plier, Snap Ring - External
- Plier, Snap-Ring - Internal
- Punch, Center 3/32"
- Punch, Pin 1/16", 4" OAL
- Punch, Pin, 1/8"
- Rule, Inch & Wire Gauge, SS, 6"
- Scissor, 3-5/8 OAL
- Scratch Awl
- Screwdriver, Offset 5/32" Slotted
- Screwdrivers, Phillips #0 x 2, #1 x 3", #2 x 1-5/16, #2 x 4"
- Screwdriver, Phillips, #0
- Screwdriver, Set 7 pcs, Jewelers
- Screwdriver, Slotted, 1/4" Stubby
- Screwdrivers, Slotted, 1/4 x 4", 1/8" x 8", 3/16" x 3", 3/32" x 2", 5/16" x 6", 5/32" x 3"
- Screwstarter
- Stripper 5-in-1 Tool
- Socket Set, 1/4" Drive, 14 pcs
- Solder Aid, Fork & Hook
- Solder Brush
- Solder Wick
- Solder, Pocket-Pak
- Soldering Iron
- Spring Adjuster, Pull
- Spring Adjuster, Push
- Tweezer, Self-closing
- Wire Stripper/Cutter Adj.
- Wrench, Adjustable, 4"
- Wrench, Adjustable, 8"
- Wrench Ignition Set 7/32"- 7/16" pouch

TEC-TUFF

9607/9707 Cleanroom Wheely™ Tool Kits

9607
Vertical Pallets

9707 Horizontal Pallets

The tools in this kit have been hand-picked to service a wide variety of equipment in the bio-medical field. The case features rugged, deep case construction, rotationally-molded, of dense polyethylene, with a heavy-gauge anodized aluminum valance with a latex gasket to keep out dirt and moisture. **Features:** four 2", built-in, cassette-type, replaceable wheels, with sealed-bearing construction; quick-release metal telescoping luggage cart handle that locks into place when in open and closed position; quarter-turn, military-style stainless steel latches with built-in hasp for padlocks; three washable pallets with drain holes, mesh document pocket. Dimensions: 17-7/8"L x 14-1/2"W x 12"D (I.D)

Tec-Tuff® with Vertical Pallets Cleanroom Wheely™ Kit
No. 9607 12" Tool Kit **$916.10**

Tec-Tuff® Case & Pallets Only
Case with Vertical Pallets
No. 758CA607 12" Wheely Case....**$457.65**

Tec-Tuff® with Horizontal Pallets Cleanroom Wheely™ Kit
No. 9707 12" Tool Kit **$924.95**

Tec-Tuff® Case & Pallets Only
Case with Horizontal Pallets
No. 758CA609 12" Wheely Case....**$518.20**

What's Inside the 9607/9707...

- Alignment Tool, Extend Tab, 6" OAL
- Cutter, Diagonal, Midget, 5"
- Desolder Braid, No Clean, 5' Spool, #4, Blue
- Desoldering Pump, Manual, Self Cleaning
- Diagonal Cutter, Oval, Full Flush, 4" OAL
- Energizer Battery "D" (2)
- Extension, For Series 99 Handle, 7"
- Extraction Tool, 8-24 Pin
- Flashlight
- Gauge, Thickness Feeler, 26 Leaves, 3" x 1/2"
- Hex Set, Ballpoint, For Series 99, .050"-3/16", 11 Pc.
- Holder, Straight, Ratchet Lock Handles, 5-1/2" OAL
- Knife, Electrician's w/Screwdriver
- Knife, Retractable, .080, 9RX
- Level, Bulls Eye, 1-3/8" OAL
- Level, Magnetic, Torpedo, True Blue, HD, 9" OAL
- L-Wrench Hex Key Set, Plated 1.5mm-10mm, 9 Pc
- L-Wrench Hex Key Set, Plated,11/16"-1/4", 10 Pc.
- Mechanical Pick-Up Tool, Mini, 4-3/4" OAL
- Mini Potentiometer Trimmer, Alignment Tool, ESD
- Nutdriver Blades: Hex, For Series 99 Handle: 1/2", 1/4", 11/32", 3/16", 3/8", 5/16",7/16", 7/32", 9/32"
- Pliers: Groove Joint, 1-1/8" Jaw, 7" OAL; Locking, Long Nose, w/Wire Cutter, 6"; Long Chain Nose, w/Side Cutter, 6-5/8" OAL; Needle Nose, Subminiature, Serrated Jaw, 4"; Retaining Ring, Convertible, .047" Tip; Utility, Midget, 1/2" Jaw, 5" OAL
- Pocket Mirror, 7/8" Diameter, Ball Joint, 7-1/2" OAL
- Probe Set, 25 Mil, 4 Pc.
- Punches: Center, 3/32", Knurled; Drive Pin, 1/8", 4" OAL; Drive Pin, 3/32", 4" OAL
- Rule, 6", 32/64 Graduations, Stainless Steel, w/Pocket Clip
- Scissor, Straight, 4-1/2"
- Scratch Awl, 3-3/4" Blade, 6-1/2" OAL
- Screwdriver Alignment Tool, Nylon, 5-3/4"
- Screwdriver Set, Miniature, 6 Pc.
- Screwdrivers, Phillips: #0, 2" Blade, 4-5/8" OAL; #1, 6" Blade, 9-5/8" OAL; #2, 8-1/8" OAL; Stubby, #2, 3-3/8" OAL
- Screwdriver, Screw Holding, 3/16" x 6", .031" Tip
- Screwdrivers Slotted: 1/4", 4" Blade, 8-1/8" OAL; 1/8", 8" Blade, 10-5/8" OAL; 1/8", Pocket Style, 4-1/4" OAL; 3/16", 3" Blade, 6-5/8" OAL; 3/32", Pocket style, 4-1/4" OAL; 5/16", 6" Blade, 10-1/2" OAL; Stubby, 1/4", 3-1/4" OAL
- Screwstarter, Double Ended, Aluminum, 6-1/4" OAL
- Service Tool, Cut/Crimp/Strip, 22-10 AWG, 7-1/2"
- Solder, Pocket Pak, Sn60 Pb40, .031", 1/2 oz.
- Soldering Iron, Pencil, 1/8" Tip, 8-1/4" OAL
- Spring Hook, Double End, Pull & Lift, 8"
- Star Wrench Set, T6-T25, Metal, Fold-Up, 8 Pc.
- Tape Measure, Mezural®, Combo, Metric/English, 3m/10ft.
- T-Handle, For Series 99, 1-5/8" x 3-3/8" , Black
- Tweezer, Filament Holder, 6" OAL
- Utility Box, Plastic, 12 Compartments
- Wire, Stripper/Cutter, to 10 AWG, Spring, 5" OAL
- Wrench Set, Open End, SAE, Ignition, 8 Pc.
- Wrenches, Adjustable, 4" & 8" OAL

TEC-TUFF

2001 Cleanroom Inch & Metric Combo Tool Kit

183 PIECES

Your *Tec-Tuff®* Cleanroom Tool Kit contains both our most requested metric and standard tools. Designed to handle most types of fasteners in a technical environment. Made to handle all the same conditions as the 9901 Series Cleanroom Kit. **Note: Wrenches & Sockets in Metric Sizes.*

Tec-Tuff® Cleanroom Inch & Metric Combo Tool Kit
No. 2001-10-3 10" Tool Kit **$855.35**

Tec-Tuff® Case & Pallets Only
No. 758CA134 10" Case.....**$321.15**

What's Inside the 2001...

- Alignment Tool: Mini, 6"
- Balldriver Set, 5/64"-3/16", L-Wrench, 7 pcs.
- Balldriver Set: 1.5-10mm; L-Wrench, 9 pcs.
- Battery, "AA" (2)
- Blade, #1, Asst. 5/pk.
- Blade; Allen Hex, 1.27mm, 1.5mm, 2mm, 2.5mm, 3mm, 4mm, 5mm
- Box, Parts, 18 Compartments;
- Box, Parts, 6 Compartments
- Crimper, Super Champ;
- Cutter, Transverse End
- Extension, 4"
- File Set, Needle, 7 pcs. w/Handle
- Flashlight
- Hammer, Ball Pein
- Handle: Ratchet, Tee, Regular
- Hemostat, Curved
- Knife, Retractable
- Knife: #1 with Safety Cap
- Mirror
- Nutdrivers, Hex: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"
- Nutdrivers, Hex: 4mm, 4.5mm, 5mm, 5.5mm, 6mm,7mm, 8mm, 9mm, 10mm, 11mm
- Parts Holder Plier
- Plier, Groove Joint
- Plier, Long Chain Nose
- Plier, Oval Head
- Plier, Relieved Head
- Probe, Communication Wiring
- Rule
- Scissor, Embroidery
- Screwdriver, Offset 1/4" Blade
- Screwdriver, Offset, Philip 1 & 2, 3 15/16" OAL
- Screwdriver, Phillips #0 w/Pocket Clip
- Screwdriver, Phillips #1, #2
- Screwdriver, Phillips #2; 1/4" x 4"
- Screwdriver, Set Ratchet Offset, 27 pcs.
- Screwdriver, Set Slotted .025"-.100" 7 pcs.
- Screwdriver, Slotted 1/4", Stubby
- Screwdrivers, Slotted: 3/32" x3",1/8" x 3" 3/16" x 3", 3/16" x 6", 1/4" x 4", 5/16" x 6" Blade
- Screwstarter; Slot 5-5/8" w/Magnet
- Snap Ring Kit
- Socket Set, 1/4" Drive, 10 pcs.
- Socket Set, Metric 4-13mm, 1/4" Drive, 14 pcs.
- Spring Hook, Pull/Lift
- Stripper, 5-in-1 Tool
- Tweezers, Self Locking
- Wiring Tool, 22-10 AWG, Stripper/Cutter
- Wrench Set, Combo, 10 pcs.
- Wrench Set, O.E., Midget w/Pouch Metric, 5.5mm-11mm, 7pcs.
- Wrench, Adj.. 4" & 8"

Black/Orange Black/Black

TEC-TUFF

Take it with you for maintenance, troubleshooting & repair!

66 PIECES

Standard MRO Tool Kit

Building on the Essential MRO kit, we've hand-picked additional tools for the next level of MRO service – on-site or off – all packed into a carrying case of heavy DuPont Cordura® nylon with industrial strength memory zippers. The double-sided case features 59 sewn-in tool pockets and pouches and comes with a shoulder strap. Additional storage capacity provided by two outside pockets with Velcro flaps and a full-length document pocket. Poly web straps with wrapped handles. Splash resistant exterior. Dims: 17"L x 12.25"W x 5"D. (O.D.) Case colors: Black/orange or black.

What's Inside the Standard MRO Kit...

- Diagonal Cutter, 5"
- Flashlight
- Gauge, Thickness
- Hammer, Ball Pein
- Handle, 99 Series
- Handle, Junior
- Holder, Straight Lock
- Knife, Electrician's
- Knife, Utility, Retractable
- Nutdriver Blades: 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", 1/2"
- Pick-up Tool, Magnetic
- Plier w/Cutter, Long Chain Nose
- Plier w/Cutter, Long Nose Locking
- Plier, Slip Joint, 6"
- Plier, Snap Ring, Convertible
- Plier, Tongue & Groove Joint
- Punch, Center
- Punch, Drive Pin, 1/16"
- Punch, Drive Pin, 3/32"
- Ruler, Stainless Steel
- Scissors, Electrician's
- Screwdriver, Offset
- Screwdriver, Slotted Pocket: 3/32" x 2"
- Screwdriver/Screwstarter, Double Ended
- Screwdriver: #0 Phillips w/Pocket Clip
- Screwdriver: #1 Phillips
- Screwdriver: #2 Phillips
- Screwdriver: 1/4" Round Blade
- Screwdriver: 1/4" Square Stubby
- Screwdriver: 1/8" Round Blade
- Screwdriver: Phillips Stubby
- Screwdriver: Ten-in-one
- Screwdrivers, Round Blade: (1) 1/4" x 4", (1) 3/16" x 4"
- Service Tool, 6-in-1
- Solder Wick
- Solder, Pocket Pack
- Soldering Iron
- T Stripper, 10-18 AWG
- Tape Measure
- Tape, Vinyl, Black, 36 yds.
- Wrench Set - 7 pc
- Wrench Set, Ballpoint - 7 pc
- Wrench, Adjustable, 15/16"
- Wrench, Adjustable, 6"

Tec-Tuff® Black/Orange Standard MRO Tool Kit
No. 758TK302 5" Tool Kit **$472.50**

Tec-Tuff® Case & Pallets Only
No. 758CA302 5" Case.....**$112.80**

Tec-Tuff® Black Standard MRO Tool Kit
No. 758TK303 5" Tool Kit **$472.50**

Tec-Tuff® Case & Pallets Only
No. 758CA303 5" Case.....**$117.80**

TEC-TUFF

We've got you covered, from one end of the plant to the other!

Deluxe MRO Tool Kit

Not only do you get an incredible, hand-picked selection of over 100 tools in these kits, you get to choose from five case options! Pick the wheeled case for its easy mobility, or our popular and convenient attache-style case, both of which are available with signature orange MRO trim accents so you can identify your tool kit easily. And, if your job takes you outdoors or into wet areas, you'll want the watertight case option – it's watertight and airtight to 30 feet! From quick, everyday tasks on up to advanced jobs, the Deluxe MRO tool kits will work for you.

Choose your case:

The Tec-Tuff® Wheeled Case: Rugged, rotationally molded dense polyethylene case with unique molded-in bumper system so the hardware and valance are "drop-protected." It features four 2" replaceable, built-in cassette-type wheels, a quick-release metal telescoping luggage cart handle, 2 keyed draw bolt latches, a three-tumbler combination lock and a provision for padlock or cable tie. Dimensions: 18"L x 15"W x 10.5"D. (I.D.)

The Tec-Tuff® Attache Case: Specially engineered, thick, high-density, structural polyethylene heat-molded under pressure to give you a case that won't sag in the center or punch through at the corners. Extra-wide, reinforced, anodized aluminum valance; deep-set to prevent the valance from separating during use. Full-length piano hinge; two ball-bearing, locking-lid stays so the lid stays open even when filled with tools; extra-wide top and bottom pallet supports; non-flex, hand-sewn, riveted pallets, a comfort-padded handle; and two heavy-duty locking latches. Molded-in feet. Dimensions: 18-1/2"L x 13-1/2"W x 10"D(I.D.)

TECHNI-TOOL EXCLUSIVE
Strongest Valance in the Industry!

Wheeled Case

Attache Case

Watertight Case

103 PIECES

The Tec-Tuff® Watertight Case: watertight and airtight to 30 feet. Constructed of lightweight space-age structural resin with a neoprene O-ring seal and purge valve. Also includes locking flanges, massive multiple latches for security and a comfortable molded fold-down handle. Dimensions: 17-3/4" x 12-3/4" x 6-1/4"(I.D.)

What's Inside the Deluxe MRO Kit...

- All items included in the Standard MRO Tool Kit plus:
- Awl, Scratch
- Brush, Long
- Brush, Solder
- File Set, Needle
- Hacksaw, Mini, 10"
- Hex Set, Fold-up w/8 Torx keys
- Level, Torpedo, 9"
- Scribe, Machinist's
- Socket Set, 1/4" Drive
- Solder Aid Tool
- Spring Hook
- Spudger, Fiberglass
- Tweezer, Filament Holder
- Tweezer, Self-locking
- Wash Bottle, Unbreakable

Tec-Tuff® Black and Orange Deluxe MRO Tool Kit
No. 758TK306 10" Attache Kit.....**$656.00**
No. 758TK304 10.5" Wheely Kit **$867.30**

Tec-Tuff® Case & Pallets Only
No. 758CA306 Attache Case **$228.40**
No. 758CA304 Wheely Case **$443.25**

Tec-Tuff® Black Deluxe MRO Tool Kit
No. 758TK305 10.5" Wheely Kit **$443.25**

Tec-Tuff® Case & Pallets Only
No. 758CA0305 Wheely Case **$443.25**

Tec-Tuff® Watertight Black Deluxe MRO Tool Kit
No. 758TK308 6-1/4" Attache Kit **$727.50**

Tec-Tuff® Case & Pallets Only
No. 758CA308 6-1/4" Attache Case....**$285.60**

TECHNI-TOOL

Electro-Mechanical Service Kit

For professionals working on any type of equipment that includes plant maintenance and installation of electronic and mechanical systems. Includes a full assortment of tools neatly organized in an attractive and rugged case. Case measures: 17-1/2" x 14-1/2" x 9" with lever style latches, bumpers to protect the hardware, wheels for easy transportation and a rubber seal to protect your investment against moisture. Color: Black.

Techni-Tool®
Electro-Mechanical Service Kit
No. 758TT775 9" Tool Kit **$861.00**

Techni-Tool® Case & Pallets Only
No. 758TT891 9" Case **$275.00**

OPTIONAL FLUKE 77-4 DMM
No. 374ME774 .....**$249.95**

What's Inside the Electro-Mechanical Kit...

- Brush, brass fill, anti-static, 7/16"
- Cutter, cable, 9-1/2"
- Cutter, diagonal, heavy-duty, 8"
- Flashlight, white beam, 5.75"
- Hacksaw, high tension, adjustable 45° or 90°
- Hammer, fiberglass, 20 oz., 13-1/2"
- Iron, solder, pencil, 3/8" chisel tip, 9-3/4"
- Knife, retractable utility
- Mirror, circular telescopic, ball joint 2-1/4" dia., 10"
- Nutdriver set, 10 pc.
- Plier, locking, curved jaw w/ wire cutter, 7"
- Plier, long chain nose with cutter, 6-5/8"
- Plier, slip joint, 8"
- Plier, tongue & groove joint, 4 position, 5"
- Plier, tongue & groove joint, 6 position, 10"
- Pliers, Lineman's, 9"
- Punch, center
- Reamer, T-handle, 1/8" to 1/2" capacity
- Ruler, stainless steel, 3/4"
- Scissor, Electrician's, 5"
- Scratch awl, 3.75" blade, 6.5"
- Screwdriver set, 12 pc. (6 slotted, 6 Phillips)
- Sensor, 50-600VAC
- Service tool, 6-in-1, 22-10 AWG, 7-1/2"
- Socket set, 14 pc, 1/4 drive, 6 pt, metal box
- Stripper, 6-in-1, crimps, cuts, 8-1/4"
- Tape measure, 3/4" x 12'
- Tape, electrical, 3/4" x 66' vinyl
- Tester, outlet, 100-125V, 3-wire receptacles
- Tool Bag, Mechanic's, navy
- Worklight, fluorescent, 25' cord
- Wrench set, 13 pc. ballpoint, inch
- Wrench set, open end, 5 pc w/pouch
- Wrench, 12"
- Wrench, adjustable ESD grip, 6"
- Wrench, adjustable w/grip, 12"

TECHNI-TOOL

Mobile Electronic Field Service Kit

One of our most popular Electronic Field Service kits of all time has now been made even more mobile with the addition of a rugged backpack style tool case. Kit includes over 100 tools vital to the field technician packed into a versatile backpack.

Ballistic nylon backpack includes padded shoulder straps and waist belt, top carry handles, large exterior pockets, as well as internal compartments for paperwork and laptop computer. The interior fold-out pallet is held securely in place when not in use and has plenty of straps and pockets for holding 70+ tools when traveling from one job to the next. **Dims.** 17-3/4" x 12-1/2" x 7", Black.
No. 758TT019 .....**$440.00**

Backpack with fold-out pallet (no tools)
No. 336CA7985 .....**$150.00**

What's Inside...

- Alignment Kit, 6-K
- Battery, AA, Industrial, 1.5V (2)
- Brush, Solder
- Combination Plier, 1" Jaw, 6-1/2" OAL
- Contact Burnishers, 3 Pc.
- Cutters: Diagonal, Midget, 5" OAL; Diagonal, Midget, Semi-Flush, to 18 AWG, 4" OAL
- Desoldering Braid, Tec-Wik, ,100" x 5', Blue
- Flashlight, Penlight, 2AA, Medical Quality, Chrome
- Gauge, Thickness, .0015-.025, 26 Leaves
- Hammer, Plumbers, Ball Pein, 4 oz., 10-1/2" OAL
- Handle, Series 99, Regular, 1-1/16" x 4-1/8"
- Hex Nutdriver Blades, For Series 99 Handle: 3/16", 7/32", 1/4", 9/32", 11/32", 3/8", 5/16", 7/16", 1/2"
- Holder, Straight, Ratchet Lock Handles, 5-1/2" OAL
- Inspection Mirror, 5-1/2", Aluminum Handle, 7-1/4" OAL
- Knife, Electrician's w/Screwdriver
- Oiler, Needle Point, w/All Purpose Lubricant
- Pliers: Long Nose w/Cutter, Serrated, 5-1/2" OAL; Retaining Ring, External, .038" Tip; Retaining Ring, Internal, .038" Tip; Tongue & Groove, Straight Jaw, 10" OAL
- Pocket Pak Solder, Sn60 Pb40, .031", 1/2 oz.
- Probes: Single Bend, #6, Straight, #1, Triple Bend Probe, #17, 25 Mil, Stainless Steel Tip, Aluminum
- Punch, Drive Pin, 1/16" Diameter, 3/4 Dr Length, 4" OAL
- Ratchet Socket Set, 1/4" Drive, 6 Pt., SAE, 14 Pc.
- Ruler, 6" Flexible, Stainless Steel, w/Pocket Clip
- Scissor, Electrician's, 5" OAL
- Scratch Awl, 3-3/4" Blade, 6-1/2" OAL
- Screwdriver Set, 1 Handle & Blades, 6 Pc.
- Screwdrivers: Phillips: #0, 2" Blade, 4-5/8" OAL; #0, w/Pocket Clip, 4-1/4"; #1, 6-5/8" OAL; #2, 8-1/8" OAL; Stubby, #2, 3-3/8" OAL; Slotted: 1/4" 4" Blade, 8-1/8" OAL; 1/8", Pocket Style, 5-1/4" OAL; 3/32", Pocket Style, 4-1/4" OAL; 5/16", 6" Blade, 10-1/2" OAL; Stubby, 1/4", 3-1/4" OAL
- Screwdriver, Screw Holding, 3/16" x 4"
- Solder Aid Tool, Fork & Hook
- Solder Aid Tool, Reamer & Scraper, 6-1/2" OAL
- Soldering Iron, Pencil, 1/8" Tip, 8-1/8" OAL
- Tweezer, Boley Style, Type AA, 4-3/4" OAL
- Wire Stripper w/Cutter, Up to 10 AWG, 5" OAL
- Wrench Set, Hex Spline, .050"-.144", 12 pc.
- Wrench Set, Open End, SAE, Ignition, 8 Pc.
- Wrench, Adjustable, 1/2 Jaw, Chrome, 4" OAL
- Wrench, Adjustable, 1-1/8" Jaw, Chrome, 8" OAL

TECHNI-TOOL EXCLUSIVE

Best Seller

TEC-TUFF

9708
Standard/Metric Shop-On-Wheels M.R.O. Kit

How often have you been in the field and reached for a tool, only to realize that the tools you need are back in the shop because you ran out of room in your case?

Techni-Tool solves your problem with this combination Inch/Metric, general-purpose, electronics field service shop-on-wheels. Containing 184 of our most requested inch and metric version tools, you'd probably think there's no more room in the case, but you'd be wrong. There's more space in the bottom – to hold your meters, oscilloscopes and more.

The case is made of rotationally-molded, dense polyethylene with: an anodized aluminum valance with latex o-ring gasket; built-in, cassette-type wheels; quick-release, metal, telescoping handle that locks in place open or closed; quarter-turn, latches.

Dims: 26"L x 15-1/2"W x 13-1/4"D (O.D.)
24-7/8"L x 14-1/2"W x 12-3/4"D (I.D.)

Tec-Tuff® Black Standard/Metric Shop-On-Wheels MRO Kit
No. 9708 Tool Kit **$955.75**

Tec-Tuff® Case & Pallets Only
No. 758CA708 Case & Pallets **$446.00**

Tec-Tuff® Case Foam Filled
No. 758CA712 Case Only.....**$460.00**

What's Inside the 9708...

- Awl, Scratch: 6-1/2" OAL
- Battery, AAA, 1.5V
- Burnishers, Contact, set of 3
- Calculator, Conversion
- Flashlight, Penlight
- Gauge Feeler: .0015" - .025", 26 Leaves
- Hammer, Ball Pein: 4 oz.
- Handle, Regular
- Hemostat, Straight Lock: 5-1/2" OAL
- Key Cap Remover
- Knife, Retractable, 3 Position
- Knife/Screwdriver, Electrician
- L-Wrench Balldriver Set - 12 pc.: .050" - 5/16"
- L-Wrench Balldriver Set - 9 pc.: 1.5mm - 10mm
- Mirror, Inspection: 7/8"
- Nutdrivers: 1/4", 3/8", 5/16", 7/32", 9/32", 11/32"
- Nutdrivers: 5/16", 10mm,11/32", 3/8", 7/16", 1/2", 5mm, 4mm, 5.5mm, 5mm, 3/16", 6mm, 7/32", 7mm, 1/4", 8mm, 9/32", 9mm Hex
- Nutstarter 4-40 to 5/16"
- Parts Box with 6 Compartments: 12-1/4" x 6-1/8" x 1-1/2"
- Plier for Copper Wire
- Plier w/Cutter, Locking Long Nose
- Plier, Chrome Slip Joint: 8" OAL
- Plier, Groove Joint: 10" OAL
- Plier, Midget Ignition
- Plier, Retaining Ring: 6" Internal/External
- Plier, Vise-Grip with Curved Jaws and Wire Cutter
- Plier/Wire Cutter Combo: 6-1/2" OAL
- Potentiometer, Screwdriver, Miniature: 4.94" OAL
- Punch, Center, 3/32"
- Punch, Pin, 1/16" Drive: 4" OAL
- Punch, Pin, 1/8"
- Ruler, Inch-Metric-Decimal: Rigid Stainless Steel, 6" OAL
- Scissors, Electrician's
- Screwdriver Blades, Slotted: 1/8", 1/4", 5/16", 3/16"
- Screwdriver Blades: Phillips, #0, #1, #2
- Screwdriver w/Pocket Clip: Phillips #0, 4-1/4" OAL
- Screwdriver, Slotted Stubby: 1/4" x 3-1/4" OAL
- Screwdrivers, Slotted - 7 pc.: 025"-.100"
- Screwdrivers, Slotted: 1/4" x 4", 1/8"x 4", 1/8" x 8", 3/16" x 6", 3/32" x 2", 5/16" x 8", 5/32" x 4"
- Screwdrivers: Phillips #1, 1/16" x 1-7/16", 3/16" x 6"
- Screwdrivers: Phillips #2, 1/4" x 1-5/16", 1/4" x 4"
- Screwstarter, Double-End: Slotted and Phillips
- Scribe, Machinist's, 2 Pt.: 8" OAL
- Socket Set - 50 Pc.
- Solder Wick, Anti-Static
- Solder, Pocket-Pak
- Soldering Iron, 25W
- Spring Hook, Pull & Lift
- Stripper w/Cutter: Up to 10 AWG Solid/Stranded wire
- Tape Measure: 1/2" x 10', 13mm x 3m
- T-Handle, Black: 3-1/2" x 1-5/8"
- Torx Blades: T6, T8, T10, T15, T20, T25, T27, T30
- Tweezer, Filament Holder
- Tweezer, Self-Locking: Nickel-Steel, 4-3/4" OAL
- Wrench Set, Ignition: 7/32" - 7/16", pouch
- Wrench Set, OE Metric: 5.5mm - 11mm
- Wrenches, Adjustable, 4" & 8" Chrome with Cushion Grip

37% LARGER CASE

1. PRICES:
Prices in this catalog are effective **January 1, 2009**. While we attempt to hold prices, we cannot control when our vendors increase prices. **All prices are subject to change without notice.** We reserve the right to correct misprints. We apologize for any typographical errors–let us know if you find any.

2. TAXES:
State sales tax will appear on all shipments to the following states unless a signed official state tax exemption certificate is furnished to Techni-Tool: AL, AZ, CA, CO, CT, FL, GA, IL, IN, MA, MD, MI, MN, MO, NC, NJ , NY, OH, PA, TX, VA, WA, % based on your location.

3. QUOTATIONS:
All written quotations are valid for thirty days from day of issuance — unless specifically stated in writing. Quotations, after being accepted, will be subject to credit approval before shipment. We reserve the right to correct typographical errors in quotations.

4. MINIMUM ORDER: $50.00. NOTE: Administrative fee of $10.00 will be added to orders under the minimum order amount of $50.00.

5. WE ACCEPT THE FOLLOWING CREDIT CARDS:

6. PRODUCTS AND SERVICE
Techni-Tool offers only the best products from the finest manufacturers. Each new product passes a quality control checklist, to assure you receive the high quality product you've come to expect. For internal quality control and training we periodically monitor phone calls to provide the best service.

7. HAZ-MAT SHIPPING:
All products marked with a Hazardous Materials symbol must be shipped via ground carrier and incur an additional per shipment surcharge. Products marked with a no airplane symbol must be shipped via ground carrier but do not incur an additional shipment surcharge. We strongly suggest you purchase in case quantities to minimize your cost.

HAZ-MAT items are **NON-REFUNDABLE & NON-RETURNABLE!**

8. OPEN ACCOUNT BILLING TERMS:
Thirty Days Net - subject to credit approval. Companies wishing to receive open terms should forward three trade references and one bank reference. Allow one week to clear. To avoid shipping delay until credit is approved, companies and individuals should use a credit card.

9. SHIPPING:
All shipments are F.O.B., Worcester, PA, USA, unless agreed to in writing. Unless instructed, we reserve the right to pack and ship your order in the most economical way. Our primary carrier is United Parcel Service. (UPS®)

95% of all items in stock ship within four hours of receipt of your order. Place your air orders by 5:30pm EST; ground orders by 5:00pm EST; and credit card orders by 5:00pm EST, and we will ship them the same day (established account required) via UPS® (unless specified otherwise). For faster service, we offer UPS Next Day Air® and 2nd Day Air®. Ask your representative about specific information and charges.

10. DAMAGED SHIPMENTS AND CLAIMS:
Please inspect all shipments immediately upon receipt.
Although Techni-Tool takes every reasonable precaution to assure the safe arrival of your shipment, accidents or problems occasionally occur. All claims must be made within ten days of date of shipment. If there is a problem, please notify the carrier immediately for inspection.

11. UNCLAIMED PROPERTY AGREEMENT:
An integral part of our terms of sale include the agreement that any property or credits that remain unclaimed after two years belong to Techni-Tool, Inc. Customers waive any and all rights to claim such amounts after this two year period of time.

12. RETURNS AND EXCHANGES:
All standard Techni-Tool products are backed by our unconditional pledge: "If, within thirty days, you are not satisfied with any product purchased (except haz-mat, custom or special order items), you may return it for replacement, credit or refund, exclusive of shipping charges."

To return a product, simply call 800-832-4866 or 610-941-2400 for a return authorization number. There is no restocking fee, except as noted, if products are returned in saleable condition within thirty days. **(Do not write anything on the manufacturer's original packaging or use as a shipping carton. Include all accessories, manuals and warranties.)** Please include a copy of the packing list or invoice with a reason for the return. Late returns and incomplete returns will incur a 15%, or higher, restocking fee. We reserve the right not to accept returns after ninety days. Your return authorization number is valid for thirty days.

13. LEASING:
Techni-Tool offers leasing through a recognized third party leasing company. The minimum lease is $1,000.00, for one to five year periods. Rates, lease terms and conditions, buy out options, credit disclosures, credit terms, pre-payments, etc., are solely between the lessor and lessee. For additional information, please call one of our customer service representatives.

14. INTERNATIONAL ORDERS:
We ship products to over 100 countries around the world. Metric size tools and 230-volt electrical equipment are available. Our staff of multi-lingual export professionals are ready to serve you. Payment can be made by credit card, irrevocable letters of credit or wire transfer. Duty, taxes and freight are extra.

Canada: please call toll free **1-800-832-4866**

Mexico: please call our Mexico team at 610-941-2400 Monday through Friday between 8 a.m. and 8 p.m. Eastern Standard Time. **Fax: 610-940-4900**.

United Kingdom, Europe, Africa: please call or fax our European office at **353-63-83866**. **Email:** stevetteurope@eircom.net. **Address:** Techni-Tool Europe, Cahenagh, Tullylease, Charleville, County Cork, Republic of Ireland.

All other countries: please call **610-941-2400** Monday through Friday between 8 a.m. and 8 p.m. Eastern Standard Time. **Fax: 610-940-4900**.

15. MANUFACTURER WARRANTIES:
No liability is assumed for any consequential damages resulting from the use of a product. Techni-Tool is not responsible nor warrants any product for merchantability nor fitness for a particular purpose. Warranties by the manufacturer, express or implied, including but not limited to the warranties of merchantability and fitness for a particular purpose, are the sole responsibility of the provider.

16. WARNING:
Certain products, when used for soldering and similar applications, produce chemicals known to the state of California to cause cancer and birth defects or other reproductive harm, including: solders and/or fluxes; soldering irons; guns; heat guns; tips, etc.; butane soldering irons, including butane.

17. TRADEMARKS
All trademarks and trade names used herein are copyrights of their respective holders.

18. RoHS COMPLIANT PRODUCTS
We've worked extensively with our manufacturers to determine which soldering products meet current RoHS requirements. These products are marked with this label throughout the book. For further information on a specific item please call customer service.

RoHS Compliant

50 years 1959 • 2009

50 YEARS OF CUSTOMER SERVICE MAKES THE DIFFERENCE.

Customer service is our most important product. It's our commitment to you.
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